

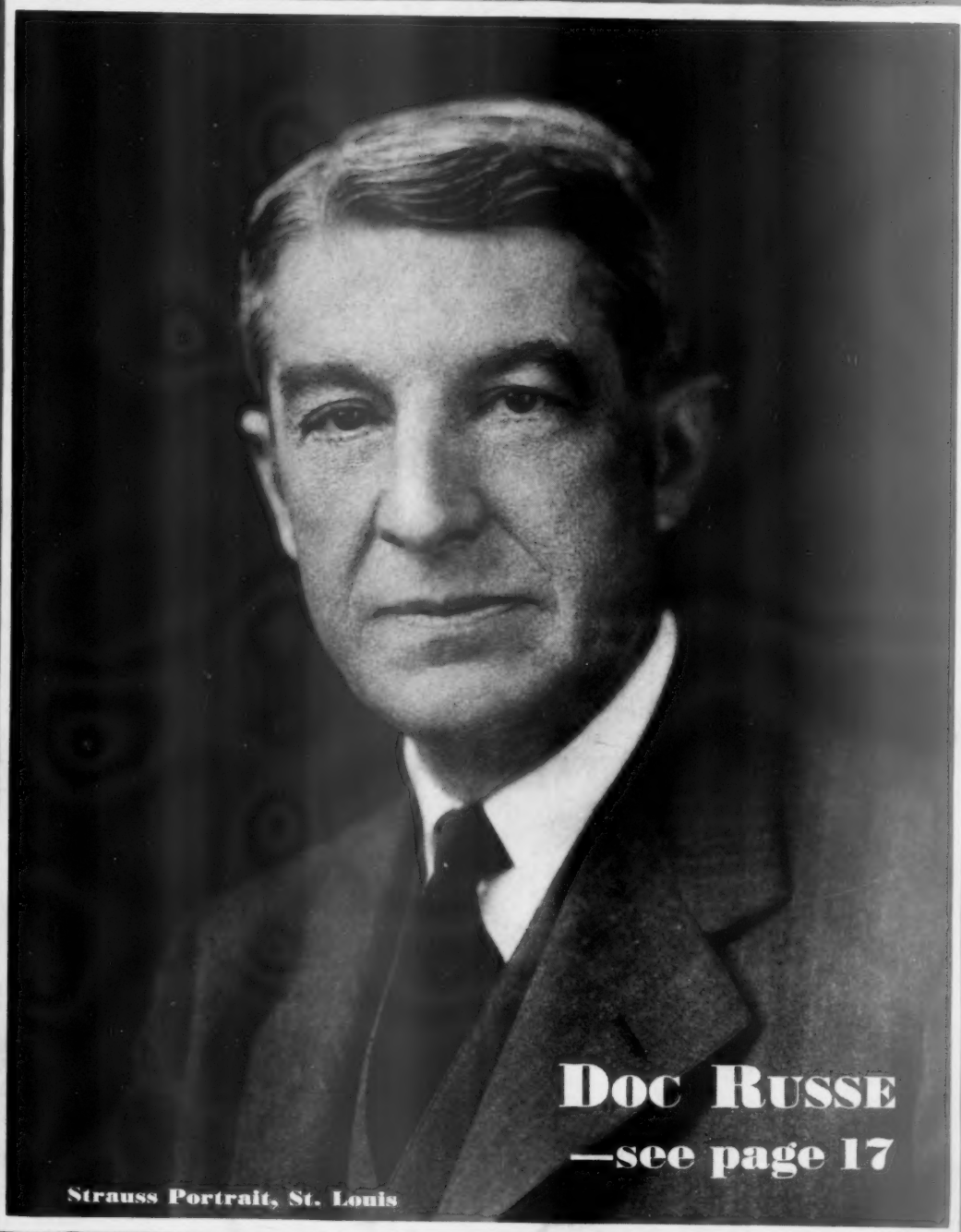
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# PURCHASING

CONSOLIDATED WITH • *The Executive* PURCHASER



**Doc Russe**  
—see page 17

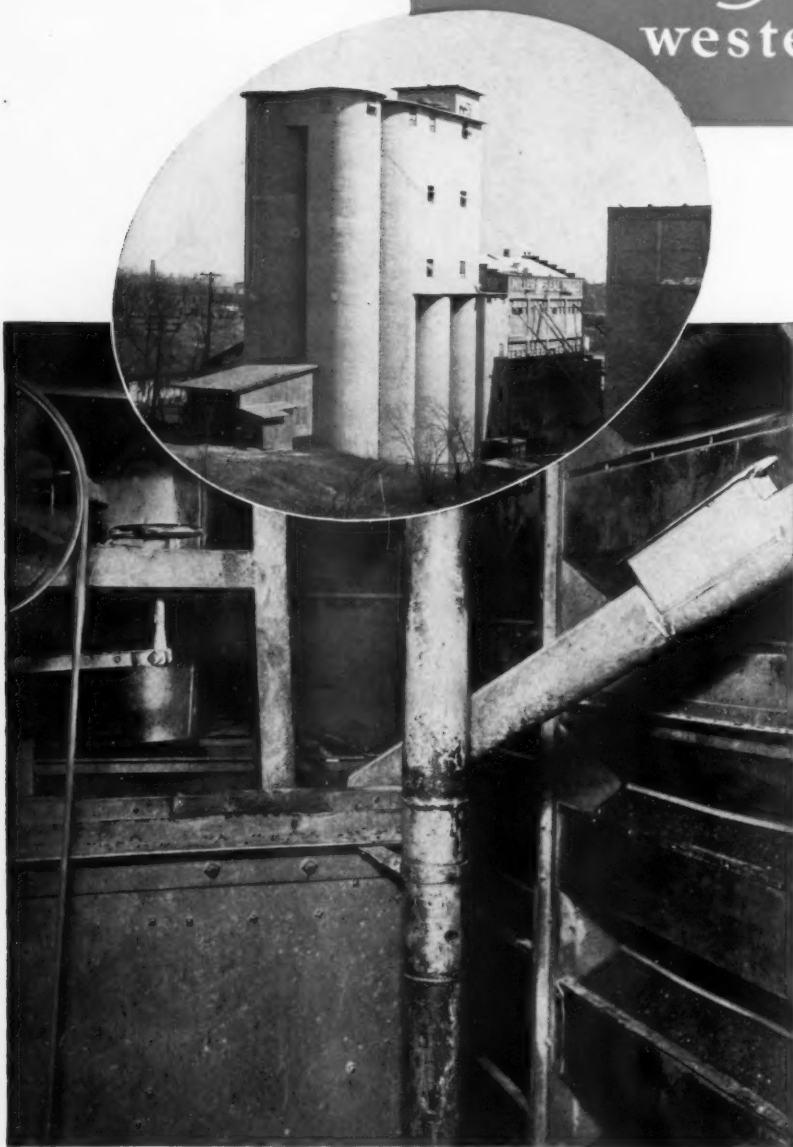
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Vol. IV No. 9

SEPTEMBER 1936

# TONCAN IRON

cuts drier maintenance  
costs 30% in this  
western cereal mill



• "After years of costly experience with different makes of galvanized sheets in our drying equipment, we gave Toncan Iron Sheets a trial. The Toncan Iron Sheets now in use are in better condition than any other galvanized sheets for a comparable time. We are happy to make known that our maintenance costs in re-covering this drier equipment have been cut more than 30%. Since equipping our drier with Toncan Iron, we have used it in many other places throughout our plant with very gratifying results." So writes an executive of the cereal mill.

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## Upward Path

To the Editor:

In the August issue of *PURCHASING* was a fine, simple, sincere article by Mr. M. C. Rider. It is worth reading and thinking about, not necessarily by purchasing agents, for whom it is apparently intended, but by salesmen.

It should be of interest to Mr. Rider and of encouragement to him to hear an opinion from the "Salesman's bench." In the writer's opinion, confirmed by our sales force, a large and increasing majority of purchasing agents today apparently think and act along the lines of Mr. Rider's philosophy. It is an encouraging commentary on the progress of American industry along the upward path of business ethics and integrity.

G. A. BARNARD  
Sales Manager  
Belting Division  
Graton & Knight Co.

Worcester, Mass.  
August 20, 1936

## A Hand from across the Sea

To the Editor:

N. B.: Your publication is excellent—a joy and an inspiration.

DR. OTTO F. GRAENICHER  
City Purchasing Agent

Zürich, Switzerland  
August 4, 1936

## Strong Silent Men

To the Editor:

Is there a calculated campaign in process to build up p.a.'s as belonging to the clan of the strong, silent men? If so, my suggestion would be to emphasize the strength rather than the silence. Taciturnity may be the evidence of strength, or of rudeness, or of complete lack of comprehension. No salesman is fooled—for any considerable length of time—as to which of these interpretations applies in any given case. The situation is something akin to the old advice about giving a firm and hearty hand-clasp. Whenever you meet a person who is obviously at pains to impress you with the strength and fervor of his grip, especially if it is not borne out by the rest of his personality, it is a fairly safe bet that this outward manner has been cultivated to camouflage his real self. Silence is less admirable, and usually less courteous, than frank and forceful expression.

E. L. S.

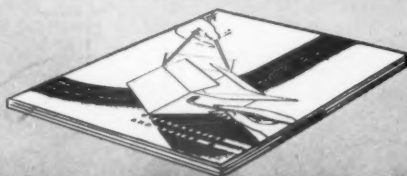
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# PURCHASING

Established 1915 as "The Purchasing Agent"  
Consolidated with "The Executive Purchaser"

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PAGE 4

PURCHASING

# Take the Z-K Short Line to Lower

## Materials Handling Costs

**Y**OU know how much money can be made or lost in handling loads up to 3,000 pounds. Successful organizations are turning this phase of their materials handling program over to Z-K Liftruck Systems. Z-K Liftrucks (Lifts and Platforms) cost little to buy, nothing but labor to operate, and regularly nothing to maintain. They are rugged, quick-moving, space-saving—worthy of your investigation. Read what users say:

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## Z-K LIFTRUCKS

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### (LIFTS and PLATFORMS)

SEPTEMBER 1936



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Butter, cheese and other perishable dairy products are whisked here and there in the Great Lakes Terminal, Toledo.



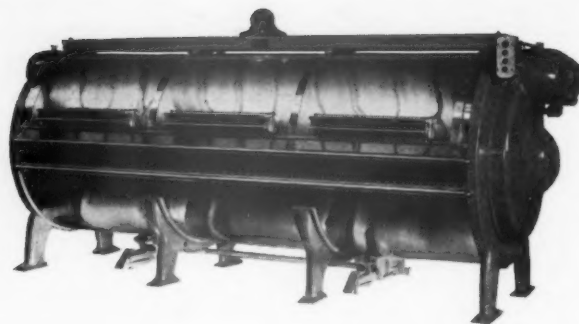
Z-K Liftrucks save steps in the electrical appliance field (The Forestek Plating & Mfg. Co., Cleveland).



This view taken in the plant of The Sherwin-Williams Co., Cleveland, shows how neatly Z-K Platforms can be stacked to conserve space. Z-K Lifts can be stood upright in a corner.

PAGE 5

# Danger Lurks in



*Typical Rotary Washer Used by Institute Members  
to Secure Thorough Sterilization*

## The "Clean Picked" Wiper

"It is no secret that many bales of wipers have been sold as 'sanitary,' which are in reality what is known as 'clean-picked' rags. These are selected unwashed rags which have been sold by the dealer without actually laundering them. Moreover, a large volume of rags is imported from foreign countries, notably Japan, and sold as 'sanitary' wiping cloths. Though most of these rags are washed in Japan before shipment, many are not and many are 'river washed.' There is no actual guarantee of effective sterilization."—Quoted from National Safety News, April, 1935.

**DEMAND  
THIS SEAL**



The "insidious thing" about the clean-picked wiper is that it may *look* sanitary and still carry bacteria capable of causing serious infection. For this reason purchasers who actually want *sterilized* wiping cloths are more and more coming to

demand the Institute Seal on every bale. This seal *guarantees* that every cloth in the bale is sterile and safe to use—that it has been boiled in a solution of pure soap—76% caustic and/or chloride of lime and dried at an average temperature of 212 degrees Fahrenheit. Institute labelled wipers cost no more—why take a chance on an unlabelled product?

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"At 8:10 next morning, the sheets were coming in. Ryerson had taken them out of stock, loaded them on trucks, and travelled all night—but the sheets arrived and a full day's production was saved."

We hope that you will not often need such fast service, but in an emergency you can definitely count on Ryerson to do everything possible to deliver the material you need at the time you require it.

And remember—this service can be secured not only on sheets, but structurals, plates, shafting, alloys, stainless—practically everything in the steel line.

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# RYERSON

# Half Way Back

**A**N IMPORTANT MEASURE of national progress in the process of recovery is the Commerce Department's survey indicating a national income for 1936 amounting to sixty billion dollars. This is almost exactly midway between the eighty-one billion income at the peak in 1929 and the thirty-nine and a half billion income in the depth of the depression in 1932. According to the same indicators, there will be a balance between the earnings and expenditures of business for the first time since the beginning of the depression, and the average income of workers will show a slight but measurable increase over last year.

The national income, in the long run, must be the foundation and the governing factor in our industrial activity. There is a reciprocal relationship, to be sure, and the fact that the balance is now on the right side means that the upswing will be accelerated. That is the heartening feature of the present report. For the past few years that balance has been approximated only through a continuation of the "pump priming" policy—the soldiers' bonus, and large governmental expenditures that cannot be considered in the light of any fundamental or permanent improvement.

There are still some serious hurdles—the lag of employment behind business recovery, and the fact that the consumer's dollar is being differently apportioned today. The price index of foods and grains stands about forty points ahead of the index for metals and textiles, and food items have the first call in the family budget.

But the important thing is that, at long last, the ball has begun to roll. It can be kept rolling, and it will gather momentum, just to the extent that this expanding income is translated into effective purchasing power. For the ability to buy and pay for the products of industry is the source of our industrial well-being.

In a number of commodity fields, sharply higher prices might have been imposed in recent weeks. It is evidence of sound sense and vision that wiser counsels have prevailed and that current gains have been held to moderate proportions that trade might be encouraged and operations increased. The effect of such policies is far-reaching, through fabricators and users whose own service might be impaired and whose products in turn might lose a promising market in the event of higher material costs.

The purchasing agent's responsibility to seek and obtain value has seldom been more fraught with public interest and economic welfare than it is today. Since manufacturing operations are eventually determined by general purchasing power, he is in a very real sense the representative of the public as well as of industry, in helping toward greater product value per dollar. If that statement seems on too idealistic a plane, it can be more concretely pointed. Efficient buying and lower product cost will enable his sales manager to sell more goods. The result is the same: greater distribution, greater production.

That is elementary purchasing philosophy, of course, but it has frequently been forgotten. Only a few years ago, the purchasing job was popularly defined as keeping the company in a competitive position with others in the field. The responsibility is deeper than that. Efficient buying can conserve and enhance the usefulness of this national income that we are now regaining.

STUART F. HEINRITZ, EDITOR

# A Purchasing Department MANUAL

*Purchasing policies and procedures at twenty-one scattered plant units of the Aluminum Company of America are coordinated and kept in control through the use of this handbook of standard departmental practice*

THE ALUMINUM COMPANY of America and its affiliates and branches are typical of the far-flung modern industrial organization. Active mining or manufacturing operations are carried on at twenty-one plant locations in a dozen states spanning the country from Connecticut to California and from Michigan to Louisiana, and in Canada and South America besides.

The effective procurement of materials for such an operating set-up is naturally rather complex. The distance between plants, and the wide variety of items required, render a completely centralized purchasing system impracticable. On the other hand, the need for a common policy and fixed responsibility demand a central organization. While geographical considerations make it desirable that some materials be bought on the local market, economy requires that other materials common to several or all of the works be purchased at headquarters.

A practical solution has been found in a purchasing organization that is partially centralized, partially localized. The purchasing agent at Pittsburgh establishes the general policies, accepts responsibility for all purchasing activities, wherever carried on, decides what items are to be bought by the headquarters staff and what responsibilities in this line shall be delegated. A local purchasing organi-

zation is maintained at each of the works, with a staff varying in size according to the number and importance of the items being purchased. This is generally in charge of a district purchasing agent, though in some of the smaller works the chief clerk serves in this capacity.

To coordinate the policies and procedures of this extended buying organization, Purchasing Agent Thomas D. Jolly has compiled a manual under the general title, "Standard Procedure for Purchasing." Originally issued in December, 1934, it was printed in loose-leaf form, collated in a binder so that new pages could be added from time to time and revised pages inserted in place of earlier material. The manual has been furnished to the appropriate company personnel, each copy being numbered and recorded in the purchasing department files with the name of the holder. It is expected of each of these persons that he will keep his copy up to date and turn it back to the purchasing department if for any reason he no longer needs it.

Far more important than the format, however, are the contents, which are here reviewed—not with the idea that they will be universally applicable, but as an illustration of the scope and method of treatment which one representative company has seen fit to adopt for this purpose. It is quite possible that another company undertaking

a similar project might find it desirable to deviate considerably from this pattern. But the basic idea is sound, and the physical task of compilation will be materially lightened by a knowledge of what has already been set down.

The manual consists of twenty-two chapters. Some of these are exceedingly brief, since a short page of text is sufficient to cover the subject. Some of them run to greater length. The system of page numbering is to designate the chapter first, and then the consecutive pages in that particular section. Thus Chapter 17, on The Purchase Order, is numbered 17-1, 17-2, 17-3, etc., up to 17-17. When specimen forms are included for illustration and reference, they are mounted one to the page and bound immediately following the text pages relating to the subject, and an alphabetical series is used to index them. Thus eight specimen forms are appended to this same chapter, the pages being designated as 17-A, 17-B, etc., up to 17-H. Each of the forms is separately listed in the table of contents so as to facilitate reference.

The treatment of the subject matter is noteworthy. There are strict regulations, of course, as there must be in any well regulated organization. But this guide to purchasing procedure is far from being a compilation of "Thou shalt" and "Thou shalt not." Rather it gives the impression of a series of letters on the pertinent features of the job,

friendly and helpful, not merely explaining the policy and setting forth the prescribed methods, but briefly noting the reasons why these policies and methods have been chosen as best for the company's interests, and indicating the basic factors which are to be given consideration in meeting emergency conditions and borderline cases.

It is quite evident from the tone of the entire manual that the company has full confidence in its purchasing representatives and relies upon their good judgment, that it expects their cooperation and stands ready to give similar full cooperation in helping them to discharge the duties of their offices. A considerable degree of autonomy is granted, necessarily, within the limits of a clearly defined general policy; procedure and records must follow more rigid lines. When these regulations are observed, and these policies followed, the divisional purchasing officers may have full confidence that the central office at Pittsburgh will back them up and accept primary responsibility for the purchasing program.

### Policy and Organization

Chapter 1, Purchasing Policy, is a clear exposition of the "why" of centralized buying, the responsibilities which it entails in relation to the general company operations, leading up to the fact that in order to meet these responsibilities the purchasing executive must actually do the buying, insisting on his prerogative of being the essential point of contact between the company and its suppliers and their representatives, both in negotiations prior to the purchase and in any later adjustments which may be necessary. In respect to other departments of the company, he must reserve the right to question quality and kind of material requisitioned, so that the best interests of the company may be served. He may avail himself of technical and practical counsel and, at his discretion, invite other executives to participate in the consideration of a proposal, but the responsibility is still his. Advice on this point embraces even such a prac-

tical detail as the admonition that in such an interview no one who is not a member of the purchasing staff shall commit himself on preference for any product or source of supply, or give information regarding performance or price which might in any way embarrass the purchasing department in its negotiations.

Chapter 2 briefly outlines the departmental organization as noted above.

Chapter 3, Legal Aspects of Purchasing, sets forth the legal principles of agency as affecting the authority of purchasing and sales representatives, and the implications of these principles regarding guarantees, liability, and contract validity.

Chapter 4, Relations with Other Departments, recognizes the service function of purchasing, both in providing the steady flow of necessary and adequate materials for the conduct of operations, and in saving the time and energy of other executives by accepting the full responsibility for interviews and dealings with vendor companies. A special section is devoted to each of the following: stores, operating, traffic, engineering, and safety departments.

Chapter 5, Relations with Salesmen, sets up a high standard of business conduct and indicates some very practical means of building good will through sales contacts, promoting the company's reputation for fairness, integrity, service, and progressiveness. There is a common sense discussion of business friendships, the reasonable side of reciprocity and its limitations as a basis of purchasing policy, a denunciation of commercial bribery in any form, and a helpful section (with illustrative examples) on how to achieve clarity and courtesy in business correspondence.

Chapter 6, Buying Proper Quality, develops the thesis that value is obtained through the selection of a quality best adapted to the service, a grade that will fulfill and not exceed the requirements for which the goods are intended. The purchasing tool for securing such quality is the specification, supported by

inspection. The advantages and disadvantages of various types of specifications are noted: brand or trade name, blueprint or dimension sheet, chemical analysis or physical properties, description of material and method of manufacture, description of purpose or use, identification with standard specifications known to the trade generally and to the seller, and sample. The characteristics of a good workable specification are rehearsed. In this company, inspection is not a function of the purchasing department, but efficient buying demands that the purchasing agent be assured of a reasonable check against specifications and be informed of the results.

### Quantity and Price

Chapter 7, Buying Proper Quantity, outlines the expenses of keeping materials in stock, amounting roughly to a carrying charge of 2% per month, and correlates this with other factors entering into the determination of the best quantity to buy. Operating and stores departments are responsible for the data on demand for a given item; the purchasing department is responsible for the decision as to the amount of material to be carried and the calculation of material costs. It is therefore logical that the purchasing department should assemble the factors and determine the ordering quantity, which can be discussed with the requisitioning department if there is any great deviation from the stated request. There is an outline of the considerations limiting minimum quantities and maximum quantities, and the instruction to incorporate as an integral part of all stores and purchasing records the economical ordering quantity established on previous lots and all facts necessary to revise it, so that the determination will not have to be made over again for each purchase.

Chapter 8, Buying at a Proper Price, places on the buyer a responsibility for a knowledge of values that goes deeper than price list tabulations or a mere comparison of competitive bids. It relates

*Continued on page 46*

# Some Recent Developments in the Field of Plastics

*New fabricating methods and equipment, a wider range of applications, and new facility in design mark the recent rapid growth in use and popularity of plastics*

**FRANCIS A. WESTBROOK**

Consulting Engineer

(Photographs by courtesy of General Plastics, Inc.)

THE EXPANSION of the plastic industry keeps on apace. About a year and a half ago an article in this publication called attention to the very rapid growth of the industry during the recent past, the wide scope of the applications of plastic materials, and the fact that new uses were increasing at such a rate that it was not possible to say that any given application was really impracticable. During the past eighteen months there has been so much progress in the art that a brief review citing a few actual examples of what has been done is decidedly necessary in order to keep up to date with developments.

We have passed through the mechanical epoch and have learned how to make almost anything that we want, in large quantities and with great economy, and we have now reached the stage where materials, design and quality have first place. Plastics, being so versatile in application, so susceptible of being varied in design to suit an almost infinite number of services—and frequently so much better adapted to these services than the materials formerly used—are consequently being used more and more for all sorts of purposes in this new “epoch of materials.”

## Stock Molds

One direction in which much progress has been made recently is toward some degree of standardization. This applies particularly to molded products and the use of stock molds. One difficulty with such products in the past has been that unless very large quantities were called for, so that the high cost of the mold could be absorbed, they were hardly practicable. Now, however, most molders have con-

siderable numbers of stock molds on hand for a wide variety of products so that it is not prohibitive from the cost standpoint to order a small quantity of parts which can be made from stock molds. For this reason it is well worth while, in designing anything which is to be made of plastic material, to find out the dimensions which are available from such molds before definitely deciding on what is to be used. For instance, the handles used for a great many products can be made of plastics to good advantage, and there are stock molds available for handles for automobiles, stoves, radios, and any quantity of other things. The color can of course be varied to suit any given color scheme, and the same is true of the decoration, neither of which are dependent on the mold in any way.

Much the same is true of the forms for coils used in the electrical industries. There are many stock molds for different shapes and sizes of coils, and the forms can be made of whatever of the phenolic materials will give the desired dielectric strength. Also, many packages for various products where the package is designed for re-use by the consumer after its original contents have been used, can be made from stock molds in colors and with decorations to suit the individual purpose. A wide variety of items

used as premiums can be made in the same way.

Another interesting and important development in the industry is the use of cast molds. In this process the mold, made of beryllium copper, is cast around a model. It has the advantage of making a faithful reproduction no matter how elaborate the design, and in general such molds are much less expensive than steel molds, although the latter must still be used in industrial and precision work.

## Furniture Assembly

A brief consideration of a few of the newer uses of plastic materials will also help to give a good idea of what is taking place and show very plainly that it is no longer safe to assume that some one of them is not suitable for a given condition without looking into the matter rather carefully. One of the most suggestive and interesting developments is the use of molded parts for the assembly of metal furniture. As practiced by the Daystrom Corp., it has been the means of substantial savings and simplification in production. The molded parts are used for joining tubular metal parts at right angles, or where there is a change in shape or size. For instance in joining a vertical tubular part to the stamped steel base of a

smoking stand, let us say, the joint is made by a molded piece which extends well into the tube and also into the base and held in place by friction. A similar job was done with the assembly of rectangular stands and tea tables to hold the corners of the tray and the trim to the upright legs. With one of this company's products, a tea wagon, the number of molded parts runs as high as thirty-two.

The whole point is that this method of assembly permits of very rapid operation with the help of machinery, and reduces the hand work. It also eliminates the equipment necessary for bending tubing and metal moldings into many shapes and of various lengths and eliminates welding of a great many joints. The forms or jigs for bending of course become obsolete when the design is changed and that

constitutes a loss, which is done away with by the use of the plastic molded fittings. The use of the latter sounds complicated in a way, but the experience of the Daystrom Corporation is that it is a procedure which pays handsome dividends.

Another interesting plastic product which has recently been greatly improved, and which is indicative of the fact that there is practically no field into which plastics do not penetrate, was the series of lamp shades exhibited at the New York Lamp Show held in July. The manufacturer had greatly improved the plastic used as a lamp shade material, as well as the methods of decoration and form.

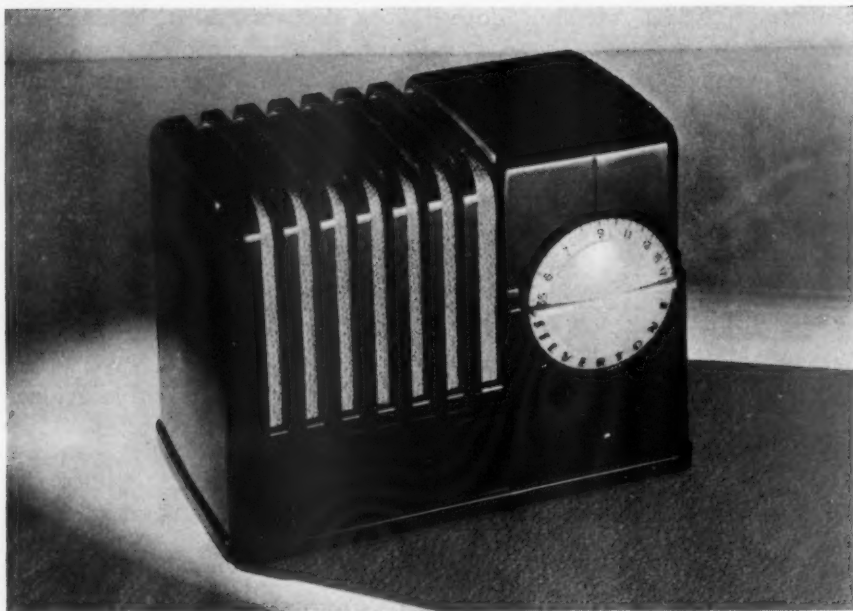
Perhaps one of the greatest strides which has been made in the handling of plastics where used in a decorative sense is that the present designers no longer try to make it

look like something else, but handle in such a way as to bring out its own inherent properties of beauty and usefulness. This is one of the important reasons for the great success of costume jewelry and the large number of inexpensive plastic products of different kinds sold in chain and department stores. In other words, the importance of good design has been recognized, able designers have been developed, and there are now firms and individuals who can be employed to handle these materials to the best advantage. Design services may be purchased just like engineering or law services, and they are usually well worth while.

### Electrical Uses

The use of plastics in electrical work as insulation is of course old. In its various forms it has long been





A radio cabinet of today, modern in design, in functional utility, and in its choice of material

used for the assembly of switches, switchboards and all sorts of control apparatus. But just recently the possibility of having different and attractive colors has been employed to dress up and make more interesting certain kinds of electrical installations. An excellent example of this is the use of color at broadcasting station WOR. Color is used for a number of the instruments such as microphones and transmitters and other equipment. Of course plastics are used for the panels of the control desk, as well as for the power control board panels, knobs, switch handles and bars.

Naturally in electrical work it is very necessary to consider the electrical properties, as well as the mechanical properties, of the various plastic materials. Some types are suitable for low frequency currents and others for high frequencies, and it is important to make the right selection. Thus the phenolic and urea compounds have mechanical advantages which makes them adaptable for tube bases, sockets, knobs and so forth, but they are not suitable for high frequency insulation. The meta-stryol and polystyryol resins give the lowest high frequency losses.

Another point which is important and worth considering because it applies to almost any use of plas-

tics, is that a great deal of the use of this material in a broadcasting station is special to that installation as regards dimensions and shape. This means that the expense of a mold is hardly practicable and for that reason the machinability of the compound selected should be given consideration, and the possibility of securing the desired high finish in this way. On the other hand Sears Roebuck has just standardized on a molded phenolic cabinet of modernistic design for its radio cabinets. Here of course is a case where large quantity production absorbs the cost of the mold.

#### New Applications

New uses for plastic materials come out very rapidly and the number of examples could be multiplied almost indefinitely. In looking through a list of patents in this and foreign countries references to the most widely divergent applications will be found. Many of them are doubtless still in the development stage so far as practical usage is concerned, and may never be practical, and on the other hand a great many will surely find their way into industry. Just a few examples will serve to show how wide the field is and how individuals and research organizations are looking in every direction.

Thus one reference is to the use of a plastic for replacing the lead sheathing of electrical cables to lighten their weight and give greater permanence. A new plastic compound has been developed which is fireproof, which can be made in transparent sheets like glass or in opaque sheets, to be used for partitions or other applications where fireproofing is desirable. Another French patent covers the substitution of natural or synthetic resin for replacing the asphalt in part or in whole in asphalt blocks and so giving them any desired color.

#### Fabricating Equipment

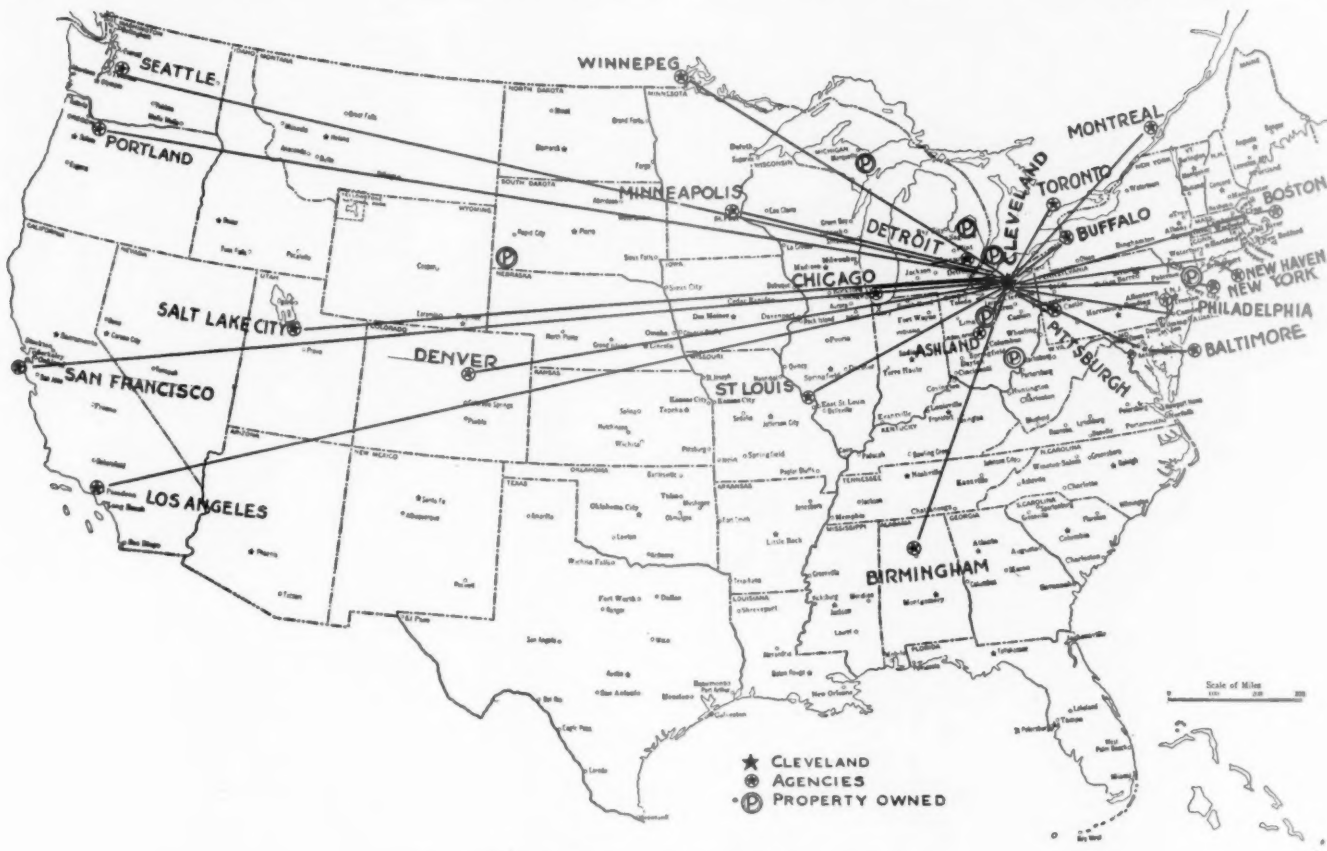
A discussion of recent developments in the field of plastics cannot be even reasonably satisfactory without some reference to progress in the machinery used for turning out products made of these materials, for their cost and suitability depends in very large measure on the means available for manufacturing them. Of course most of the operations of machining are done very largely on standard machine tools with special attention to the cutting tools, but in a good many cases this cutting involves considerable waste. This is particularly true with small products made from rods and tubes.

One of the most recent developments for cutting without waste is a slicing machine for use on any plastic material which is softened by heating; it can be operated at very high speeds.

By means of good cooperation between the producer of the plastic raw material and the fabricator it is possible for the latter to receive his raw materials cast in forms which reduce subsequent machining operations very substantially. That is, the cast raw material may be of such shape that when pieces are cut off from the stock lengths they will require as little machining as possible. And when it comes to the latter, the ingenuity of the fabricator, and his cleverness in cooperating with his machinery suppliers to design and use special attachments on his standard machines is of extreme importance.

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*"Don't look now, but I think he's through with Sports and over into the Stock Market section."*

# SILHOUETTE STUDIES

## 6: Frederick William Russe

**A**N ARTICLE IN LAST month's issue of *Chemical Industries* paid tribute to the late Edward Mallinckrodt, aptly terming him the chemical pioneer of the Mississippi Valley. It opened with a human interest touch. Just prior to the World War, a young chemist who had been placed in charge of purchasing for the Mallinckrodt Chemical Works, approached his chief with a proposal supported by facts and figures. The proposal was that the company operate with a skeleton force, fill orders for the ensuing six months from accumulated stocks, and thereby save several thousand dollars a day.

Mr. Mallinckrodt turned down the proposal. Owning the business, outright, any losses incurred during the slack business period would fall on him. He declared he could afford the strain better than the workers who would be released if the suggested plan was followed. Besides, his business philosophy was that good times follow bad, and ultimately there would be a market for all the stocks built up by continuing production.

Ostensibly the moral of that anecdote is that the young purchasing agent—Frederick W. Russe—was taught a lesson in humanitarianism and economics. Yet that is hardly true. It is conceivable that if Russe had to decide the point even in those days, he would have reached the same decision as his chief. His responsibility at the time was not to determine the course of action; it was to prepare and submit data which would allow a decision to be made with full knowledge of all that was entailed. Faced with the same set of circumstances today, he would probably follow the same line of procedure that inspired the anecdote.

For one of Russe's characteristics is a factual approach to all problems. He is an inherent scientist,

as well as a highly trained one. Before he acts or decides on important questions he appraises the facts in each case. Then if he deviates from the indicated action—and he does in many instances—it is with complete knowledge that his decision is influenced by intangibles.

Not that he is cold or impersonal. On the contrary, his quiet wit dominates many gatherings with his cronies. He holds his own at light persiflage or profound discussion of economics and philosophy. He can interpret, and even amplify, Spangler's theory of the decadence of western civilization, and he can turn from such heavy discussion to play a rubber of bridge in a manner which would elicit the applause of Ely Culbertson. Scholarly in appearance, training and diction, he gets a kick out of the undignified appellation "Doc" fastened on him by his close associates in purchasing circles.

Nor is he a theorist in matters pertaining to business and government, as men of specialized training are likely to be. Reared as a Cleveland Democrat, he scouts the major economic experiments of the past few years. To discourage or hamper the making of reasonable profits in business, he holds, is to disrupt the economic system which has been and can be most effective in providing highest standards of living for the American people. Less regulation and regimentation of industry, in his opinion, is the sound course for permanent business recovery. One hearing his views on this point can have little doubt as to where his vote will be recorded in the coming election.

**F**RED RUSSE was born at Indianapolis, August 18, 1880. The German ancestry indicated by his name extends back on his father's side, whose own parents came to this country in 1823.

Reticent in matters concerning himself, about all that can be learned from Russe concerning his boyhood is that it was normal and uneventful. It was distinguished by excellent schooling, however, and after a preparatory course in St. Paul's School, at Garden City, L. I., he entered Harvard with the Class of '02. At college he was fond of athletics and made some of the class teams, but he did not attain to the select list of letter men.

Graduating in 1902 as an A.B., Russe devoted the following three years to post-graduate study of chemistry, first at Harvard, then at Leipsic, in Germany, then back again at Harvard where he was awarded a Ph.D. in 1905. In the last year of this study he won a scholarship established by the Mallinckrodt Chemical Works. One condition of the scholarship bound him to engage in the company's service for a year, so on July 14, 1905, he started his business career in the laboratory of the Mallinckrodt plant at St. Louis.

Within a year he was acting as purchasing agent of the company. Mr. Mallinckrodt felt training in chemistry was essential for the man who bought the highly specialized products and equipment used by his concern, and he sensed that Russe was ideally equipped for the job. That the judgment was sound is indicated by the fact that since he was appointed purchasing agent in the spring of 1905, Russe has continuously supervised the company's buying.

**T**ECHNICALLY he is no longer a purchasing agent. His responsibilities now are broad and executive in nature. In 1922 he was elected to the directorate and in 1925 he became secretary of the Mallinckrodt organization. The company has a well organized and competent purchasing division and

personnel, but Russe still supervises the major policies and procedure of that department. His early business training taught him that purchasing is an essential principle of management, and he applies that knowledge to the benefit of his company.

But his present interest in purchasing extends far beyond that limitation. For example, he is vice president of St. Luke's Hospital, and one of the movements in which he is particularly concerned is a council activity to increase the efficiency of hospital buying through sound methods of centralization. A few years ago he devoted considerable time and effort to service on a committee which sponsored centralized purchasing for the State of Missouri and succeeded, against open and covert opposition, in getting legislation passed to improve the governmental purchasing procedure.

Likewise Russe is a faithful attendant at national conventions of the purchasing clan. He is recognized there as one of the Old Guard, for he was instrumental in organizing and administering the Purchasing Agents' Association of St. Louis and took an active part in affairs of the National Association of Purchasing Agents in the pioneering days of that organization.

**I**N THE BEGINNING his interest in the national body was critical. From the start Russe believed in the principle of a national association for purchasing agents and accurately evaluated its possibilities, but he was impatient with some of the methods of administration and the laxity of organization effort, outside the major industrial centers, which characterized the National Association of Purchasing Agents in its infancy.

His views were representative of sentiment among purchasing agents in his own district, and in 1920 he was nominated for the N.A.P.A. presidency on a platform slogan: "Nationalize the National."

In those days the association elections followed horse-swapping tactics. Theoretically, each member

was entitled to cast an individual vote for the officers he preferred. Actually, a group in each local association determined how the vote of their constituents should be cast. "You vote for our candidate and we'll vote for yours" was a common interchange between local associations striving for a place on the national slate.

Russe had an excellent campaign committee. It circularized the national membership with pertinent facts pointing to his fitness for the presidential office. It inserted paid advertisements in *The Purchasing Agent*, then official organ of the association, detailing his qualifications and background.

But when it came to practical politics the committee lacked judgment and experience. It overlooked the possibility of private conferences with the bosses in some of the dominant local associations. In consequence, some of the support promised to Russe was lured away before the polls opened. This may not have changed the result, for Russe was opposed by W. L. Chandler, who had won considerable prestige and a large personal following through his able handling of standardization activities for the national association. But the lack of political foresight certainly reduced Russe's chances at the polls, and he ran a poor second in the election.

There were ominous rumblings of discontent from the St. Louis Association, which had hoped to win the presidency and the following annual convention, but lost both. Russe himself accepted defeat gracefully, impassively, and his attitude undoubtedly squelched any serious movement of revolt within the national association. Nor did the denial of high office diminish his interest and participation in association activities. In fact, it probably inspired him to work harder for the geographical expansion and reform in procedure which he knew were essential for the sound development of the association.

Twice in later years Russe turned down nomination for the N.A.P.A. presidency. On either occasion he

could have been elected without opposition. One factor in his refusal was the heavier business responsibilities he had assumed, but those behind the scenes knew also that he would not jeopardize the chances of a friend to become president of the association. And Russe's action was an important influence in enabling the late Kirke H. Taylor, then purchasing agent of the Illinois Glass Company, to achieve that ambition.

**O**RTHODOX IN HIS OWN views on economic and political questions, Russe is tolerant of opposing opinion. He grants the right of expression to the other side, and listens to that expression with respect if not agreement. It is not only to outsiders that he manifests this characteristic. He tells, with a twinkle in his eye, that some of his most interesting debates on current problems find him aligned against Mrs. Russe and his older daughter, both of whom incline to so-called liberal philosophy.

Russe is deservedly proud of his children. His eldest son, a graduate of Harvard, '32, seems destined to further follow his father's footsteps along the path of commercial success. One daughter is married and the other is a recent graduate of Bradford Junior College. Of the two younger boys, one plans to enter engineering college this fall, and the other is still in the preparatory stages of his education.

In the past decade particularly, it has become apparent that purchasing experience is an excellent preparation for broader executive responsibilities. Many men who ten years ago were serving as purchasing agents and active in association circles are now high officials of their own or other companies. In most cases they are entirely divorced from purchasing and their names and personalities are unfamiliar to the present generation of buyers. Doc Russe is an exception. As long as he is in business harness he may be expected to typify the paraphrase: Once a purchasing agent, always a purchasing agent.

—L. F. B.

# Interview Memories

**B**UYING has achieved a sense of economic science. Purchasing agents are recognized as useful and necessary links in the business chain. They are quite conscious of their contacts with the sales force. In fact, much study is given to the division of time for interviews, the sorting of calls, and the value of sales representations, whether for cockroach poison or automatic lathes. Don Clark, in a recent paper, analyzed his business day with a mild sense of shock that he spent so much time on salesmen. Those who read his paper must have been impressed with the courteous attention in store for those who may call on a sales errand.

The human side of the interview is my hobby, in retrospect. Each new call is always so fresh and recent that it is difficult to assay. In looking back, however, across a few years, several incidents are conspicuous.

There was the lady with the red hair. Women in business are no novelty. Some few find an outlet for their talent in selling. Not many, it is true, but an occasional individual. In this particular case, in addition to the deep bronze red hair, which was entirely in order, the caller had a most extraordinary command of language.

She was selling an office specialty, a fingernail guard or some such dincus. That part of the interview has grown vague. The thing I do remember is the way she sounded her vowels. Her articulation was very exact and the words she used were enough to bother Webster himself. We are accustomed to learned speeches. The lads who offer to push one up Bunker Hill have a prattle. Some automobile salesmen have a "line." This interview was different. I really believe

*Human interest makes half a dozen random incidents stand out sharply from the routine of fifteen years*

**H. W. ELKINTON**

Philadelphia Quartz Company  
President, Philadelphia P.A. Association

that our friend had actually studied a course in sales language over a period of considerable time. Under such circumstances the role of the buyer is simply to listen.

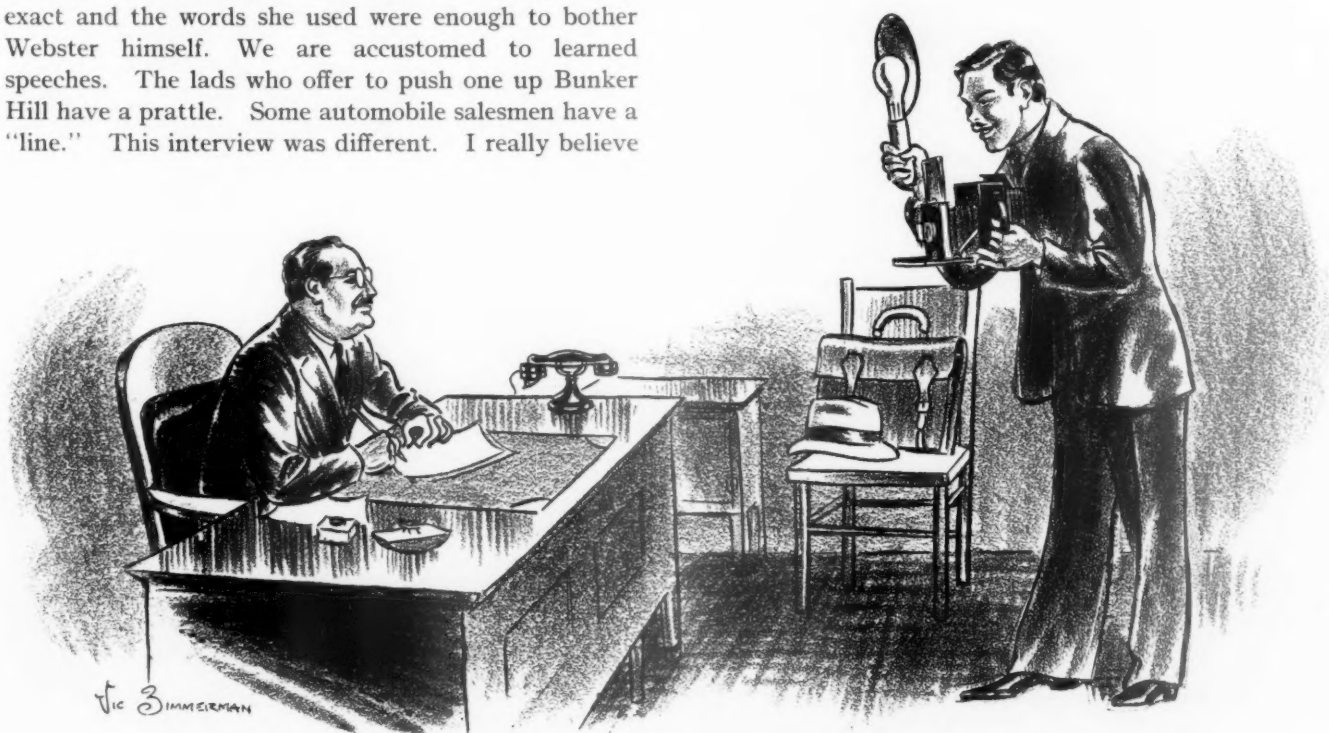
On a certain day when mental gears were idling and belts were a trifle slack, I was summoned to the telephone.

"Is this you, Hiram?"

My answer was instant: "Yes."

Now it so happened that there were two Hiram in our office. A salesman happened to have that slightly unusual Christian prefix dating from the time of Tyre, as well as myself. Hardly two words had passed before I realized that this call was from a man whom I knew all too well, and whom I shall call Mr. Bull. Bull was calling the other Hiram, of our sales force, in order to importune him to importune me for an order.

"Do you know Hiram Bingswanger pretty well?" he asked.



To this I could in conscience answer truly, "Fairly well." Under my breath I had to add, "But not as well as I might like."

"Will you do something for me?"

"What is it?"

"Put in a good word for me, won't you?"

"I'll see what I can do, but I can't promise much."

I grew dangerously curious and asked Bull what kind of a fellow he thought Hiram B. to be, and came off luckier than I deserved, as P.A's have a hard bitten reputation. But by that time the wire was beginning to warm up. My fury at this kind of approach was melting my end of the earpiece. Also, if this conversation continued for any considerable length of time it would be 110% waste from a business management point of view. Fortunately, he soon brought it to a close.

"Okay, Hiram, I'll be seeing you."

To which I was able to respond without a twitch for the truth, "Okay."

The sequel to that incident was sad, at least from the order-getting standpoint. The identity of his two Hiram's was eventually disentangled, and I lived up—to the best of my ability—to the meager commitments of the conversation.

Once in a while a salesman does capture an order—strange and extraordinary performance! I often wonder how it happens. One could spend a year in an asylum listing the reasons that procure a "buy." Aside from personality, there is the element of chance. Once in a very long while, our company considers the purchase of an elephant cradle. The market for such cradles is thin—or fat, depending on the elephant. The number of times a salesman of these cradles stops in with the chance of nailing an order then and there, is as rare as if he were peddling cellophane hinge wrappers to the purchasing department of Hades, Inc. But just such a fortuitous circumstance did occur. I was never quite clear who was the more astonished—the salesman who stumbled by accident into our front door on that particular day, or the purchaser who hadn't the remotest idea where to look for a source of supply.

Naturally the underlying virtue on the part of a vendor's representative, as with everyone else, is that elusive and undefinable something which is called personality. Sometimes an individual has too much. Occasionally a young man may take to the road who is too good looking. Such a superfinely featured youth has called on me. I can hardly give attention to his wares or his story because of wondering how God ever made such a very handsome young man.

Another drummer leaps to the reverse. He can never capture my attention for his paper specialty because he is so awfully homely. He has had the dreadful misfortune of smallpox on top of features that were never blest. One should feel most sympathetic.

One salesman has called from time to time who engages sympathy and attention because of a slight stammer. If his impediment were worse, the hurdle would be too high and buyers could not wait to hear the mes-

sage. As it is, human sympathy hustles to the rescue and one is attracted to the merchandise and the brave man who sells.

One of the most amusing interviews I ever had was with a Japanese. The reason of his call was not to sell me direct, but to get a line on the hammer handle industry. There was grave doubt in my mind about the repercussions of trade if Jap hammer handles came slipping through the Customs as a result of our conversation. However, he bore letters of introduction from a good friend of mine in Tokio, so I was disposed to do the best I could, at least to inform him in regard to the hammer handle producing areas and the natural interest of American manufacturers to debar hammer handles of their own design if made in Japan, although the hatchet folks might fancy the Oriental association. About that I did not know.

At all events, at the end of the second interview, he thanked me too profusely for the "kindness." He presented me with a plate, on which was pictured an ancient Chinese junk—rather suitable withal, as in that glory day the Japanese made junks for their cousins across the shallow sea. The case that held the plate was padded and lined with silk, and the outside felt like the nap of a kitten's neck. But this was not enough attention. He insisted on a photograph. He crowded me into a corner and snapped the picture, later courteously sending me a print as well as sending one to my friend in Tokio—as evidence of the interview, I suppose. With it came the following letter (in which the names have been altered, as throughout this article):

"Thank you very much for your kindness given to me on my last visiting.

"According to your kind advice I am going to take a trip to Madagascar from next Monday. I hope and pray myself that the business may be fruitful. If you have some occasion to let me know some nice idea of doing this business, I will appreciate your kindness.

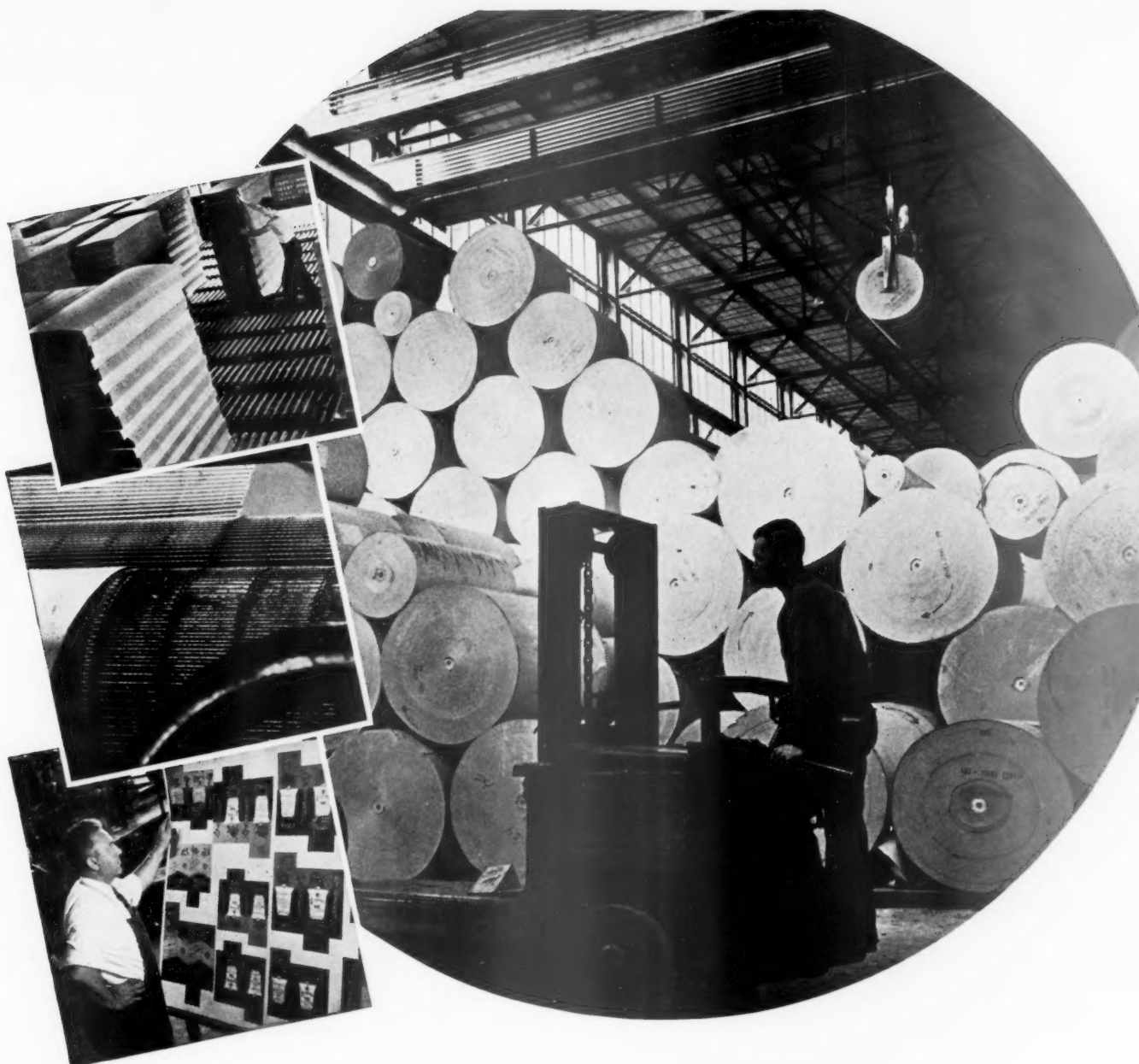
"Enclosed the photo taken then, but I am very sorry that it is not good for the light was insufficient. I will send the one to Mr. Kamakura who may be glad to see you through the picture. If I have a chance in future to go to you, I shall do nice then.

"Thanking you again for your kindness,

Yours Sincerely,

T. Morioka"

After reading and rereading that letter, absorbing the quaintly expressed thought, I marvelled at the courage to visit these shores and to acquire sufficient knowledge of the language to write a thank-you letter that will "do nice then." What distance would I make if I had to express my gratitude in his curious, euphonious tongue and in an absolutely foreign idiom? The visit, the letter, the decorative plate, and that darkly indistinct photograph all combine to score as the strangest business interview I have ever entertained.



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SEPTEMBER 1936

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# F. O. B.

## (Filosofy of Buying)

**R**EFUTING THE GAG line of a currently popular anecdote, and indicating that it may quite conceivably be of interest other than to another gorilla, a recent requisition came to the desk of City P.A. Bland Dysart of Dallas from the Park Department, specifying a female of the species for the Marsalis Park Zoo. And incidentally, that requisition has provided the first "poser" for Dysart in his three years of buying for the city. For it seems that there are none in stock among the dealers and big game hunters, and none available for exchange among the zoos; furthermore, the governments of French and Belgian Congo have put a prohibitive export tax on the animals to preserve the species, which is becoming somewhat scarce in the native habitat. Among the potential suppliers who had to decline the order was the famous Frank (Bring 'Em Back Alive) Buck. At latest reports, the P.A. was hopefully awaiting a knock on the office door by some enterprising sailor who might have bootlegged one of the big apes into the country.

• •

N.A.P.A. predicts a 20% increase in business. Which is ample justification for the less conservative sales managers to up their quotas by 40%.

• •

### P.A.'s Mother Goose

"You are tough, Mr. Buyer," the salesman said,  
"And utterly heartless, I swear.  
Yet you, too, have salesmen out earning their bread;  
Is that how you wish them to fare?"

"In my youth," he replied, "I was mild as could be,  
And kindness filled all of my days,  
But I soon found the salesmen were doing to me  
Just what ours do to other P.A.'s."

"You are tough," quoth the salesman. "Your motto,  
they say:  
The vendor should give till it hurts.  
When you've dressed down a score of poor cubs some  
fine day,  
Pray, what do you do with their shirts?"

"My sole education," the buyer replied,  
"Has been in the School of Hard Knocks.  
And I learned that the best way of saving my hide  
Was to stand up and trade socks for socks."

**H**O HUM, IT'S getting to be quite a job keeping abreast of these fast moving times. Here we are, scarcely out of the "What's this?" era, and we find ourselves over our ears (quite literally, thanks to the omnipresent radio) in the "Who's there?" age. However, we must be modern at any cost, so here goes:

Knock! Knock!  
Who's there?  
Emma.  
Emma who?  
Emma-gency order, please rush.

Knock! Knock!  
Who's there?  
Tom.  
Tom who?  
Tomorrow we'll ship the goods.

• •

Curious Cuthbert wonders whether the FTC will be as prompt in their decisions explaining the Robinson-Patman Act as the courts were with respect to NRA. The trouble with compromise legislation is that it serves to start arguments rather than to settle them.

• •


"One reason why college men are getting to the top these days in purchasing," says the Old Line Buyer, "is because we can't get along any more with a vocabulary limited to *How much?*, *Yes*, and *No*."

• •

**T**HE BOYS IN Pittsburgh are already at work on their convention. F.O.B. makes it a practice each year to suggest an appropriate slogan for the gathering. The suggestion is never adopted, but it serves a useful purpose in that it automatically eliminates one possibility. Like the man who had one special pocket for his automobile key, and thus saved time by having one place where he need not look for it when he wanted to use the car. This year, with a city of outstanding industrial interest as a setting, and the assurance of a swell program besides, we propose:

*PITTSBURGH—PLUS!*

But on second thought, that might not sound so alluring to purchasing men.



**HERE'S  
MORE POWER  
TO YOU  
BOSS...**

*Water  
Power!*

**MODERNIZE WITH**

*Frigidaire*

## **WATER COOLING EQUIPMENT**

● Plan now to bring your plant up-to-date. Give it the stamp of progress and success. And give your men the finest drink that ever quenched a well earned thirst. Invest in *Water Power* in 1937 — invest in Frigidaire Water Cooling equipment!

Plenty of cool, refreshing water close at hand means comfort and goodwill for the men on the job. And from your own standpoint it means greater efficiency in every department . . . more production, fewer accidents. Frigidaire equipment also means a tremendous saving in dollars and cents over ice. A saving so great

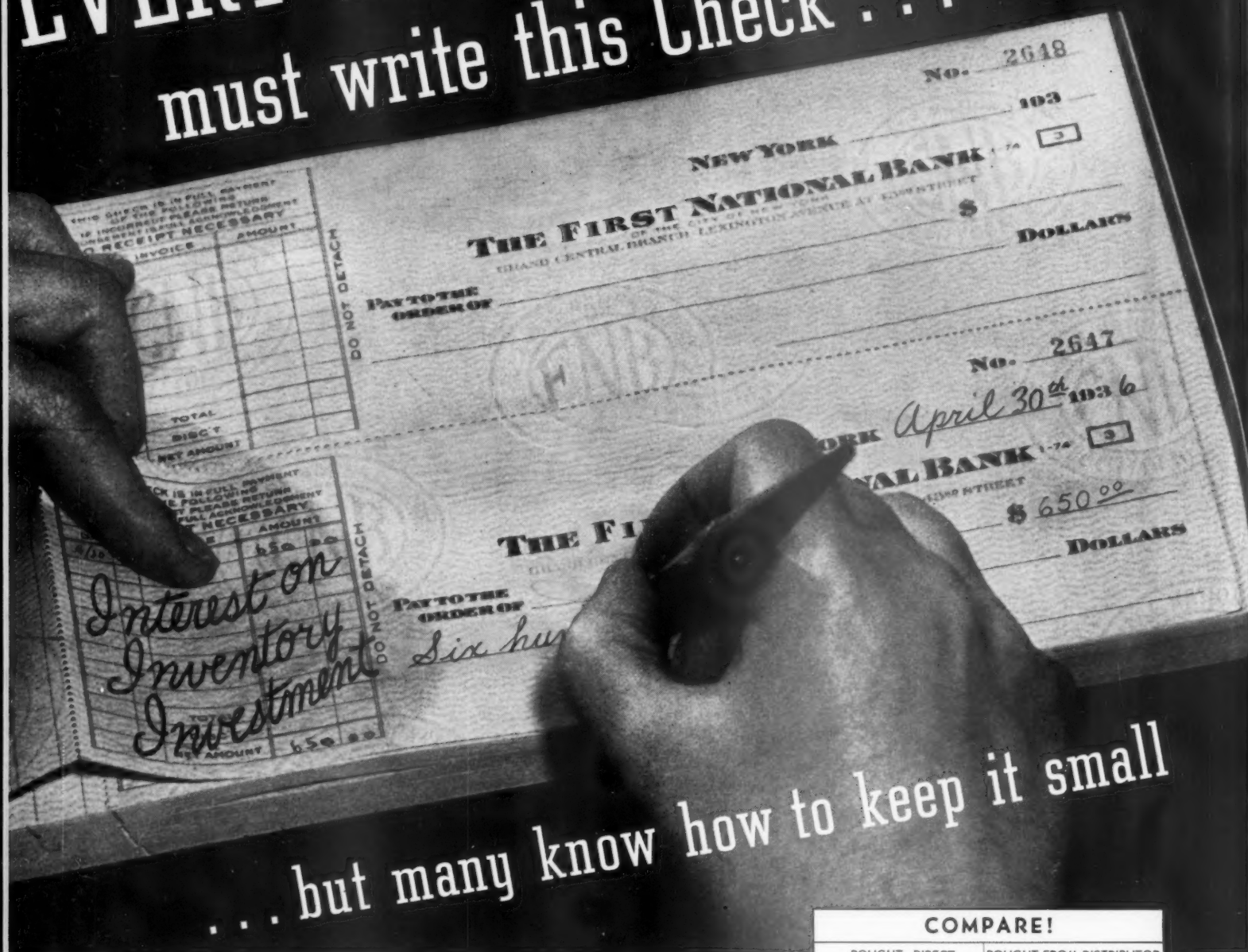
that Frigidaire actually pays for itself in a short time and continues to earn a big investment return for years to come.

There is Frigidaire Water Cooling equipment for every need. Efficient, dependable and economical. It will pay you to get complete details. Find out how little it costs you and how much it saves you to have cool, sparkling water throughout your plant. *Investigate at once, and include Frigidaire equipment in your 1937 budget. For free survey and estimate see your nearest Commercial dealer or write*

*Frigidaire Corporation, Dept. 81-9, Dayton, Ohio.*



# EVERY BUYER must write this Check . . .



## . . . but many know how to keep it small

"INTEREST on Inventory Investment" . . . is one of many stock-carrying costs that every buyer must pay. And since it is not so well hidden as others, this item often arouses buyers to a serious examination of the "actual" cost of their industrial supplies, in contrast to price paid.








Figuring interest cost at only four per cent, it is found that one dollar is added to the price of every hundred dollar's worth of stock every ninety days it stays in the storeroom. To a plant handicapped by slow turnover this can mount to a large sum annually. But, to a concern that turned its stock 10.8 times a year, interest charges were negligible . . . only 37 cents on each hundred dollar's worth of merchandise handled.

A high rate of stock turnover accounts for the success many buyers have had in reducing not only interest charges, but all of the costs of stock-carrying. Charges for storage space, heat, light, cleaning, insurance, taxes and labor . . . all decline as the

rate of stock turnover increases. By keeping a small, well-controlled stock, one famous plant reduced such charges to \$2.36 per \$100 worth of merchandise handled. Another, permitting slow turnover to exist had to pay \$5.56.

That rapid turnover of a comparatively small stock can be attained without skyrocketing purchasing costs has been proved by hundreds of buyers. By utilizing their local industrial distributors' facilities, buyers assure immediate delivery of supplies, in small quantities, at frequent intervals. By informing distributors on probable requirements practically any plant need can thus be met with on-the-dot service. Also, since many items can be consolidated on a single order, purchase-work is minimized instead of increased.

Compare the actual cost . . . the cost of supplies at point-of-use . . . with "quoted" prices and you will find that it pays to fully utilize distributors' services.

COMPARE!	
BOUGHT DIRECT	BOUGHT FROM DISTRIBUTOR
Price paid for Supplies bought Direct from Mfr. 	Price paid for Supplies bought from Distributor 
Freight, trucking etc. to plant storeroom 	Store-Door Delivery
Increased costs in Purchasing, Labor, Warehousing 	Lower Purchasing, Labor, Warehousing costs 
TOTAL ACTUAL COST of Industrial Supplies bought Direct from Manufacturer 	TOTAL ACTUAL COST of Industrial Supplies bought from local Distributor 

Makers of Jenkins Valves for more than three-score years, we know that Jenkins' customers are served better and more economically through Industrial Distributors than they could be through direct negotiation. Further, we are convinced that Industry can profit by fuller utilization of local Distributors, and in this advertising present some of the sound reasons for this conviction.

*Jenkins Bros*

D I S T R I B U T O R S   S E R V E   I N D U S T R Y   E C O N O M I C A L L Y

# THE MARKET PLACE



*A quick review of the market noting major developments in supply, demand and prices of selected basic commodities*

## Supply

## Demand

## Market

### COAL

PRODUCTION OF bituminous coal rose in mid-August to a rate of 7,700,000 tons weekly, the heaviest output recorded since the first week of March. At the end of the month activity had receded slightly but the average was high, and the year to date is substantially ahead of 1935. Output of by-product coke, which rose throughout the second quarter, was less active. Mine employment is better and some operators are a little behind in shipments.

INDUSTRIAL CONSUMPTION of bituminous coal is rising. The Lake movement, however, receded during August. Demand for anthracite has been relatively slow, though August sales exceeded those of last year. It is estimated that 100,000 household coal burning plants have been replaced by oil for the coming winter.

THE PRICE ADVANCES in anthracite and steam coal recorded a month ago, have been well maintained and the market is generally firm. Late in August, Central Illinois operators raised the price at mine 10 to 20 cents per ton. Indiana, Ohio and Western Kentucky mines followed this example on the first of the month, the higher grade seams being advanced 10 cents. There is some talk of a further advance about mid-September.



### COPPER

WORLD STOCKS of copper were reduced 26,580 tons in July, U. S. stocks down 10,100—the best record of the year. Domestic output is being steadily raised by the large producers to check the possibility of runaway prices, one smelter in Utah coming back into production at one-third of capacity after six years of idleness.

SALES FOR AUGUST amounted to 25,503 tons, only about one-seventh of the July record total and a natural aftermath of that tremendous buying wave. 80% of the sales were for November delivery. Judging from the volume of lead sales for cable manufacture, utility buying is becoming a heavier factor.

THE PRICE OF  $9\frac{3}{4}$  cents was maintained throughout the month. The reluctance of large producers to advance to 10 cents, and their currently expanding output, headed off some sentiment to push the quotations up to the higher level. The wage scale at several properties in Utah was raised 5%. Foreign copper was strong during the greater part of August, softening somewhat toward the end of the month.

### COTTON

CROP CONDITIONS in August were extremely unfavorable, deterioration of 12.2% for the month being far in excess of the ten-year average. As of September 1st, the indicated yield is 171.4 pounds per acre, as compared with an average yield of 175.2 points. By this indicator, the new crop will be around 10,980,000 bales, more than half a million bales short of last month's estimates. Picking has been rapid, but part of the new crop is being held off the market. Foreign crops will again exceed U. S. production.

TRADING IS HEAVY, and spot cotton in good demand, while hedge selling depresses the future positions. Cotton goods continue active and jobbers are buying liberally in anticipation of forward requirements. Foreign use of U. S. cotton has been sharply curtailed by political unrest and higher import duties.

COTTON PRICES sagged steadily throughout August, the spot quotation on middlings losing nearly a cent in declining from 12.61 to 11.69, the daily fluctuation being in a narrow range at all times. Cotton yarns and cloths followed the same downward tendency, losing from  $\frac{1}{8}$  to  $\frac{3}{8}$  cents in the course of the month. There were indications of a recovery in early September but a futures market at new lows for this movement did not support it with any great strength.



### LUMBER

LUMBER PRODUCTION in August was about 70% of the 1929 average, close to the highest levels of the year, slightly heavier than new orders and substantially in excess of shipments.

SHIPMENTS OF LUMBER in August, ranging from 60 to 66% of 1929 averages, were disappointingly low, but new orders were in good volume, justifying the production rate.

HARDWOOD PRICES were reasonably firm during August. Southern pine, however, continued the downward tendency of July, declining from 22.64 to 22.39 per M feet at mid-month, subsequently recovering slightly to a level of 22.41.

## Supply

### IRON and STEEL

STEEL OPERATIONS continued at a high rate during August. Reaching 72.2% of capacity in the second week, which was next to the highest figure recorded for the year, activity broadened to a rate of 72.5 in the following week. At the end of the month, the level had receded to 71.5 but the general upward trend was still strongly sustained. Far from anticipating any real dip for the industry, steel men are confident that the record of 74% will not prove to be the peak for the year and some go so far as to predict that 80% to 85% will be attained before the end of October. Meanwhile the inability of many mills to make prompt shipment of their products has added greatly to the activity and importance of warehouse distribution. Inventories in the hands of consumers are relatively light in relation to the rate of use. Pig iron production, which has been dull and featureless for several months past, is also expanding and stocks are hardly more than ample.

### NAVAL STORES

UNDER THE FEDERAL curtailment plan, in which the majority of producers are cooperating, fourteen million cups have been withdrawn from production for the balance of the crop year, which ends in March. This represents a 10% cut in production from now on—not as great as originally contemplated in the plan, but nevertheless a substantial reduction, amounting roughly to 30,000 barrels of turpentine and 100,000 barrels of rosin. It is particularly significant in view of the fact that stocks are only slightly heavier now than at the beginning of the crop year, rosin stocks being actually lower than a year ago.

### PAPER

CANADIAN NEWSPRINT production continues at a record rate of activity, 10% ahead of 1935. Wisconsin Valley mills were obliged to curtail operations up to 25% during August on account of water shortage. Board mills are seasonally expanding operations and are currently running at close to 75% of capacity.

## Demand

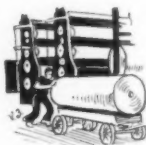
THE OUTSTANDING feature of the current high demand for steel is the absence of speculative or inventory purchasing; the great bulk of purchases is going directly into various forms of production, fabrication and use. Plates continue as one of the most active items, with large tonnages going into ship-building, oil storage equipment, and railroad repair. Otherwise demand is well diversified—a healthy situation. Export demand for pig iron has been revived, and with present high prices for scrap there is more iron going into steel making.



## Market

PRICES ON THE steel list are strong and unchanged. Announcement of 4th quarter quotations, normally made by September 1st, have been deferred, presumably for a further test of the market strength. Some upward revision is probable though it is held by many in the industry that a general advance at this time would not be warranted. Sheets and plates are most likely to be affected. Scrap prices rose sharply during the month, No. 1 Heavy Melting going to 17.50 per ton at Pittsburgh, the highest price in six years. The wage problem is still undecided and there may be additional costs on this score before the end of the year. Pig iron prices are firmer but are not likely to advance in the near future.

THE NOTABLE STRENGTH in rosin prices which was evident during June and July continued through August. From 6.75 at the beginning of the month, Grade B advanced to 6.85 in the opening week and held firm at that level until the closing days of the month, when another advance was registered, to 7.15, a net rise of 30% in two months time. Rosin has consistently enjoyed a more favorable statistical position than turpentine, and the effect of curtailed production was promptly apparent. Turpentine prices likewise advanced from 41 $\frac{1}{4}$  to 44 in the course of the month and were fractionally above this figure for a time.



AUGUST PRICE CHANGES in the paper list were confined to pulp and waste grades. Mechanical pulp advanced a dollar per ton, while sulphite pulp declined a like amount. News scrap and No. 1 mixed advanced 5 cents per cwt. The Great Northern Paper Co., which has in the past set the prevailing price for Canadian newsprint, has announced a price of \$42.50 for 1937 contracts, up 1.50 from the present figure. Other producers had hoped for a larger increase to offset rising costs.

DEMAND IS WELL sustained in both coarse and fine papers, with the latter group showing the greater improvement over the past month. Board business is also improving.

## Supply

### PETROLEUM

**A**LLOWABLE PRODUCTION of crude oil in September has been fixed at 2,864,000 barrels, a reduction of 72,900 from the August quota, but 251,000 barrels more than in 1935. Gasoline in storage was sharply reduced, but still amounts to 60,433,000 barrels, as of September 1, or 16<sup>2</sup>/<sub>3</sub>% more than last year.

### RUBBER

**M**ALAYAN PRODUCTION of crude rubber was higher during July, especially among the smaller estates. Stocks increased approximately 2,000 tons, dealers stocks being moderately up.

### TIN

**T**HE WORLD'S VISIBLE supply of tin increased by 1,500 tons during August, with a smaller carryover both in Holland and the Straits Settlements, indicating that the spot situation over the next few weeks may be somewhat easier. American deliveries for the month amounted to 5,388 tons. The U. S. visible supply on September 1 was 3,095 tons, with 6,434 tons afloat for U. S. ports. Restriction plans are highly unsettled, the meeting of the International Committee now being scheduled for September 23rd. The leading interests are said to be in favor of a two year extension from December 31, 1935, when the present pact expires, but they properly question the effectiveness of any agreement so long as Siam is outside the group. Meanwhile Siam is sending a delegate to the conference, endorsing the principle of regulation but demanding a voice in setting the quotas and a larger tonnage as her own share.

### ZINC

**P**RODUCTION OF ZINC concentrates was further expanded in August after the brief July "holiday." A rate of 6,750 tons per week prevailed at the middle of the month, which was slightly less than shipments and slightly more than sales for the same period. In the closing week production went to 7,200 tons, substantially in excess of both sales and shipments. Stocks at the end of the month amounted to 36,740 tons. Producers have long contended that consumers' stocks have been exceptionally low. This view is supported by the prompt delivery instructions on most orders and by the buying wave which developed September 1st.

## Demand

**C**ONSUMPTION OF GASOLINE was seasonally at a high rate, more than balancing present production but not enough to absorb the large accumulation of stock. Demand for other petroleum products was strictly of a routine nature.

**R**UBBER CONSUMPTION in July fell below the rate maintained throughout the second quarter, but was a high month nevertheless with a tonnage of 48,127. The total for the first seven months of 1936 is 331,097 tons, compared with 288,930 tons for the corresponding period of last year. Factory buying in August was very light.

**S**STATISTICS FOR THE first half of 1936 show an expanding world consumption of tin, with the United States outstanding as the dominant factor in this development. Whereas world consumption this year has exceeded the 1935 rate by 7<sup>1</sup>/<sub>2</sub>%, the United States has consumed 35% more than a year ago. Actual demand for the metal was sluggish during August, market observers reporting after one day's trading that the whole of the transactions were merely a "show" put on by dealers in the hope of arousing latent consumer interest.



**D**EMAND WAS ROUTINE throughout August but with the announcement of a price advance on the last day of the month a substantial volume of latent requirements came out into the open. In the 24 hours between the announcement and the effective date of the advance, approximately 20,000 tons were sold, equivalent to about five weeks business at recently prevailing rates. The galvanizing trade is brisk, and particular interest is being shown in the higher grades of zinc used in automotive castings, radiator grilles, etc.

## Market

**C**RUDE OIL PRICES were unchanged in August. The tank car price of gasoline was reduced by <sup>1</sup>/<sub>4</sub> cent a gallon, and kerosene was shaded <sup>1</sup>/<sub>8</sub> to <sup>3</sup>/<sub>8</sub> of a cent. Bunker oil advanced 5 cents per barrel, to 1.10. Retail price wars on gasoline were largely localized.

**T**HE RUBBER MARKET in August was dull and featureless, with some dealer purchases sustaining the price level within a relatively narrow range of fluctuation. The net change for the month was a decline of <sup>3</sup>/<sub>16</sub> of a cent, from 16<sup>1</sup>/<sub>2</sub> to 16<sup>8</sup>/<sub>16</sub>.



**A**FTER THE VIOLENT price gyrations of July, tin experienced a relatively moderate and stable market during the past month. The net change for August was a <sup>1</sup>/<sub>4</sub> cent advance, to 43. It is possible to see in this situation, going back to the first of July, a gradual strengthening of the price but the real buying and selling has been too limited in recent weeks to establish this as a basic trend.

**A**FTER TWO MONTHS of depressed quotations, zinc advanced a dollar a ton as of September 1st, regaining the position held prior to July. The move was apparently prompted more by the general strength of the metals group, notably the recent advances in copper, tin and lead, rather than on any statistical grounds. A similar situation occurred in July when a partial recovery was made from the low point. The price is strongly held, however, and the advanced quotation has elicited a stronger support in the way of demand than had developed in several weeks of a softer market.

*There are no "buffer" clerks at the Scovill purchasing office. Direct action rules. You press the button and the buyer does the rest*

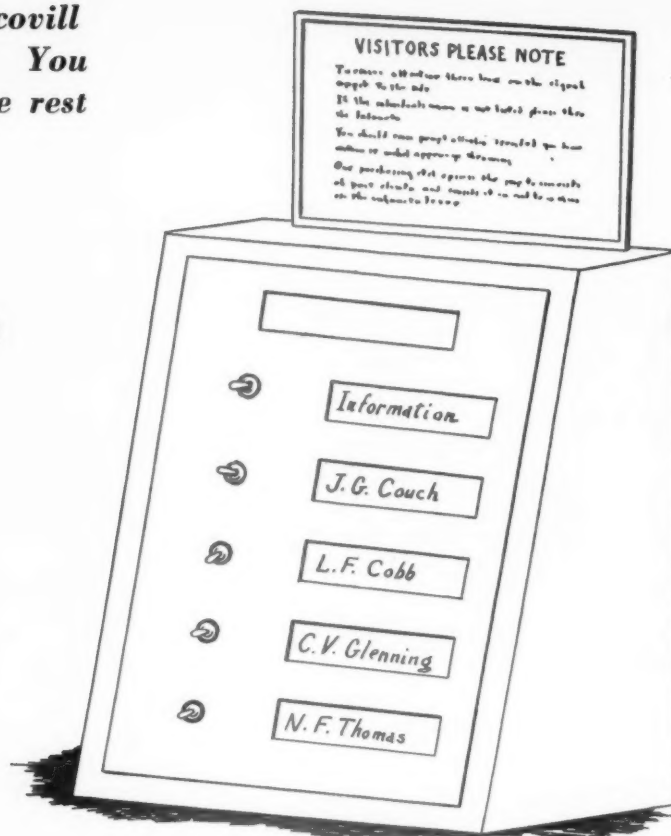
## A Self-Service Reception Room

**A**BOUT three years ago, the purchasing department of the Scovill Manufacturing Company moved down to the first floor of the company's general offices at Waterbury, Conn., immediately to the left of the entrance lobby. This move, appropriate to the company's policy of making the buying office readily accessible to visiting representatives of other companies as the first point of contact, nevertheless raised a problem of reception procedure.

In the old quarters, there was a transparent partition between buyers' offices and the departmental reception room. Even without the services of a special reception clerk, it was possible to see and give prompt attention to callers with a minimum of formality. The layout in the new location did not lend itself to such an arrangement. But through the ingenuity of C. V. Glenning, one of the buyers, a self-service call system was devised which has provided an eminently satisfactory solution to the situation, retaining the informality and courtesy as well as the efficiency that have always characterized the work of the department, without the necessity of installing an elaborate system or a full-time receptionist.

The visiting salesman is directed from the lobby desk into the purchasing department reception room just a step away. There, upon a table, he finds a cabinet with five toggle switches designated as follows:

1. Information
2. J. G. Couch
3. L. F. Cobb
4. C. V. Glenning
5. N. F. Thomas



The four names are those of the buyers who handle the majority of the company's requirements. The name of A. P. Hickcox, Director of Purchases, does not appear on the panel. While he does the actual buying of coal and some other commodities, as well as having a supervisory role in all purchasing policy, and while he makes it a rule to be as readily accessible as the other members of the department whenever the business in hand requires, it has been found best to route his calls through the "Information" switch. This avoids a considerable amount of unnecessary interruption and confusion, for a number of inquiries directed to the department head, which would subsequently be referred in the regular manner to the buyer handling that item, can be routed directly to the buyer without this unnecessary and time-consuming intermediate step.

Above the switch panel is a neatly framed notice explaining the operation of the system:

### VISITORS PLEASE NOTE

To receive attention throw the lever on the signal apparatus to the side (in either direction) and leave it there.

If the individual's name is not listed, please throw the Information lever.

You should receive prompt attention. Provided you do not, within 15 minutes, we shall appreciate your throwing the switch lever again.

Our purchasing staff appreciates the importance to our visitors of prompt attention and

considers it an aid to us if you will use the Information lever provided there is any undue delay.

About four out of five salesmen calling at the plant know which one of the buyers they wish to see. They announce their presence by throwing the appropriate switch. The effect of this is to sound a buzzer signal at the buyer's desk. One important feature of the system is that the signal is a continuous one; the buzzer sounds until it is shut off by a switch at the buyer's desk, thus making sure that the call has actually been received by the person intended. Incidentally, the caller has the same assurance, for the signals are audible in the reception room.

The policy of the department is to answer the signal and grant the interview as promptly as possible, and the experience of salesmen in this regard is generally extremely favorable. If the buyer happens to be engaged at the moment so that it is impossible for him to step out into the reception room immediately, an assistant may be sent to acknowledge the signal and to note the caller's identity and errand, or the buyer makes a note upon his desk pad that someone is waiting, and answers the call at the earliest opportunity. The instructions as to a follow-up ring as a reminder in the event that the waiting time amounts to as much as fifteen minutes, are literally intended, and keep the schedule moving.

Salesmen on their initial call, or otherwise unfamiliar with the departmental organization, throw the "Information" switch, and are promptly received by a member of the secretarial staff, who makes a note of the type of material under consideration, and refers the call to the proper buyer. Thus if the interview concerns electrical or plumbing supplies, hospital or laboratory items, paper, paper products, boxes or cartons, stationery or office equipment, the salesman is referred to Mr. Couch. If it concerns lumber or wood products, castings or casting shop supplies, machinery, tools or mill supplies, it is referred to Mr. Cobb. Oils and greases, rubber and leather goods, chemicals, porcelains, advertising materials, engravings and electrotypes come under Mr. Glenning's supervision. Steel for fabrication is bought by Mr. Thomas. This division of responsibility enables the information clerk to direct the caller promptly to the buyer who is authorized to discuss that particular material.

Beside the signal apparatus is a telephone. That, too, is coordinated with the rest of the system. As stated above, it is the company's policy to have all sales contacts made through the purchasing department. There are occasions in every organization when it is desirable to have other divisions consulted and participate in the discussion. Under such circumstances, the proper procedure is still to work through the buyer, who willingly cooperates when the circumstances justify this additional contact. To prevent abuse of the privilege, and to add a measure of control,

*Continued on page 65*

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**THE HOWARD PAPER CO.,  
URBANA, OHIO**

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Send me the new Howard Portfolio.

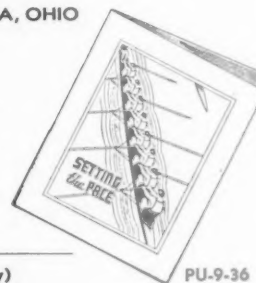
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PU-9-36

## EVERYDAY ECONOMICS

# The Rewards of Risk

THE CLASSICAL economists of the eighteenth century, dissecting the industrial mechanism of their day to see what made it tick, discovered a number of diverse factors contributing to the production of wealth, and announced the principle that each of these factors is entitled to a measure of credit and reward for its part in the process: wages for labor, rent for the use of land, interest for the use of capital, and profit for successful enterprise.

There was nothing particularly revolutionary about that statement, which was merely another application of the old fable about the head, the hand, the heart and the stomach debating as to their relative importance and coming eventually to the conclusion that no one of them could get along without the others, whereupon they decided to work together and function as one complete body.

The early economists were not crusading reformers in the sense of trying to set definite ratios of merit as between these various factors, to correct apparent maladjustments in the distribution of wealth, or to devise a form of social and political organization that would insure an equitable working out of the general plan. They were interested first of all to learn the rules, and to establish the relationships of cause and effect. A very considerable part of our industrial history since that time, however, has revolved about differences of opinion as to these relative shares, frequently losing sight of the real point of the fable altogether.

It might be construed as liberal on their part to insist on an adequate wage at a time when serfdom and slavery were still common among enlightened nations; yet that statement had been anticipated by several centuries in the Biblical obser-

vation that the laborer is worthy of his hire. Conversely, in advancing the claims of capital for a return in the form of interest, they were in the position of defending a system that, in its abuse, had been the scourge of the Middle Ages until curbed by anti-usury laws.

But whether liberal or conservative, the century and a half that has since unfolded, with its wealth of case material set against a background infinitely more complex and radically changed in many particulars, has shown them to be keen and clear thinking analysts, whose deductions have not been successfully flouted for any considerable period of time in spite of new conditions, new habits of thought, and new political philosophies. There is no really cogent reason for believing that their acceptance of the profit system is any more or less vulnerable than other portions of their thinking.

IN THESE LATTER days we have become accustomed to speak of the profit *motive*, with something just a little bit derogatory implied in the phrase. It may provide a more reasonable and dispassionate approach to think of it in terms of the profit *reward*, a manner of speaking that aligns it more accurately with the other shares in the proceeds of industry.

Reward for what? The answer is simple—for risk.

It is important to keep this point clearly in mind, for it can easily become confused. Some, for instance, conceive of profit as the reward of managerial ability. But while it is true that profitable operation is largely dependent upon that ability, managerial services really belong in the category rewarded by a wage—a higher wage, to be sure, and oftentimes by agreement cal-

culated as a percentage of the profit, but nevertheless a wage. Others, since profits are frequently stated as a percentage of capitalization, would make them a perquisite of capital. But this is only partly true, at best, to the limited extent to which common stock capitalization assumes the business risk. There are other forms of capital, and accounting practice insists that the integrity of capital equipment must be maintained by adequate depreciation allowances and that preferred stock interests and other forms of borrowed capital, being free from usual business hazards, shall be rewarded at an agreed interest rate before a profit can be found or declared. The line of distinction is sometimes tenuous, especially in small concerns where invested capital and managerial services are closely associated within the group; nevertheless it is there. "Nothing venture, nothing gain" refers directly to the profit reward.

SUCH AN ANALYSIS of the industrial scheme recognizes that economic wealth does not increase of its own accord, that land and capital may lie idle, and that labor may be unproductive—until actuated by the spark of initiative, confidence, ambition and courage that is willing "to put it to the touch, to gain or lose."

The person or group responsible for this function in business enterprise, the classical economists described by the term *entrepreneur*, which can be literally translated as the undertaker. It is not probable that they had in mind the macabre significance which now attaches to this English equivalent for their word, yet it has a certain appropriateness in the light of commercial history and in emphasizing that element of risk which characterizes the



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U.S.A.

function. There has never been a time in our national life when that confidence and initiative has been wanting. We point with pride to scores of vigorous enterprises with a record of continuous operation close to the century mark, or over, in which several successive generations have found a useful livelihood. But statistically these cases are a very small minority. The rate of mortality has been high, the average life span substantially less than a decade. Truly the launching of a new commercial venture would give a double significance to that traditional chant of Yale undergraduates in the sports arena: "Another little job for the undertaker."

That is the more dismal side of the picture, stressed only to insist upon this essential element of risk. Actually, the steady long-term increase in our aggregate national wealth is proof positive that on the recap balance sheet, these "undertakings" have been spectacularly successful. Furthermore, the abandonment of

a venture does not necessarily con-  
note its failure. It may be volun-  
tarily relinquished, or merged with  
another related enterprise. It may  
have served its purpose, as on a  
stated project or when bound up  
with the life of an individual. There  
may be a realization, or an opinion,  
that the profit possibilities in a par-  
ticular case are not worth the risk,  
that the same effort could be more  
advantageously applied in another  
direction or the same capital secure  
a comparable return, with greater  
security, if placed at interest. In  
the case of actual failures, it has  
been found that the majority of such  
ventures were ill-advised from the  
start or had not enough resources of  
capital and skill to carry them  
through the initial stages.

By and large, however, the profit  
opportunity does exist, and con-  
tinues to offer a handsome reward  
for the exercise of discriminating  
judgment, enterprise and courage.

Also, at least up to the time of the  
World War, it was generally con-

ceded among the nations that the  
best way to develop economic  
wealth and to achieve a strong posi-  
tion in the world family was by en-  
couraging such enterprise. Since  
that time, under a variety of new  
political regimes, there has been a  
tendency for the state, or the people  
as constituting the state, to assume  
the role of *entrepreneur* on their own  
account. This does not alter the  
nature of the function. In so doing,  
they take for themselves the oppor-  
tunity of making a profit, and the  
risk of losing a greater share in the  
form of taxes or general wage in-  
come. Just as in the case of private  
enterprise, they are meeting with  
widely varying degrees of success.

Only a few years ago, a large  
proportion of our population went  
in for *entrepreneur-ing* in a big way,  
by proxy and on margin, through  
the purchase of common stocks on  
the Exchange, and had a taste of  
both the reward and the risk. Un-  
fortunately, the courses were served  
in the order named.

**T**O SPEAK OF business risk, and to cite its manifestation in the fluctuations of stock market values, is not to say that commerce and industry are altogether, or even primarily, speculative in nature. Modern business science, based upon experience, analysis and foresight, has done much to eliminate the element of chance, and business policy generally frowns upon speculative methods. This is well illustrated in the case of purchasing policy, which would lend itself very readily and directly to the speculative approach and is in fact constantly subject to this temptation. But purchasing, in successful practice, is guided by quite a different set of considerations, closely correlated with very carefully estimated requirements.

Normal business risks include such factors as obsolescence—changing manners of life and the inconstancy of style acceptance, technological developments, new materials and processes that may render a whole plant or a whole industry obsolete almost overnight; economic and political movements—the broad trends of price, demand and purchasing power, cyclical fluctuations, monetary policies, labor difficulties, international relations; the vagaries of supply—crop conditions, controlled production, transportation, failures, dependence on foreign sources; competition—from more efficient or more aggressive units or from countries maintaining lower living standards; besides “fires, floods, acts of God, and other circumstances beyond our control.”

Some of these can be anticipated with a considerable degree of accuracy; others are unpredictable, and precipitate emergency conditions. Some can be met by quick adjustments; others require rebuilding from the bottom. All of them indicate the advisability of alert, intelligent contacts, flexibility, and prudent reserves. It takes more than confidence and courage to stay in the game.

**O**NE OF THE CHIEF concerns of industry, and of governments interested in conserving the commer-

cial resources of the nation, has been in the direction of mitigating these risks, or their effects. The government's part has included land grants and subsidy, franchises, the enactment of protective tariffs, technical research, coordination service in the formulation of standards, the appointment of commercial attaches in the trade centers of the world, regulatory supervision through the I.C.C. and F.T.C., and various forms of beneficent legislation right down to the three-month old Robinson-Patman Bill. The very fact that such measures can be attacked as interfering with the operation of economic law is evidence of their forthright intention to accomplish exactly that purpose.

Meanwhile, business organization has been developed toward a similar objective. Syndicates and stock companies afford a means of dividing the risk; corporate organization succeeds in limiting personal liability.

Management policy has turned to integration of related industries as a hedge against the hazards of uncertain supply and to conserve the profit possibilities inherent in a complete industrial process. It has adopted product diversification as a means of averaging the uneven fluctuations of demand and of smoothing out the seasonal and periodic curves of production and unemployment. It has sought size beyond the process of normal growth and expansion in order to secure a dominant position in the competitive struggle.

It has developed a highly organized policy of trade cooperation to insure that all might be working toward a common goal, prompted by the sad experience that the rugged individualist has too often turned out to be a ragged individualist.

With the aid of government it has sought to stamp out competitive practices recognized as predatory and unfair.

**E**FFORTS SUCH AS these are basically proper. Business enterprise should be granted the fullest possible measure of security. There is no virtue in taking a risk for its own sake.

But business risks generally have not been taken for their own sake. They have been accepted in the hopeful and reasonable expectation of a reward in the form of profit—a share of produced wealth that is potentially greater than other shares because of the risk involved. It is a matter of choice; the price of security, of guaranteed principal, of an assured wage, is a limited and lower return.

This is a very fundamental choice, possibly an index to character sufficiently revealing to serve as a basis for general classification. In one of the “sidewalk interviews” currently popular on the radio, it was concretely put in the form of a hypothetical question: given the choice between an extremely modest but permanently assured income in one position, and the opportunity for much greater income—at the risk of drastic loss—in another field, which would you choose? In this case the results showed a sharp cleavage as between the sexes, the women declaring for security and the men expressing a willingness to incur the risk. One of the latter, however, questioned the reliability and true significance of the answers, for in a public statement the matter of personal dignity and pride might lead some to assert a bolder nature than would appear in the quiet and irrevocable moment of an actual decision. We fancy ourselves in the role of *entrepreneur* and would like to be accepted as possessing the qualities that go with it. That expression itself had significance, particularly as we are now considering a program of security on a national scale. Will it involve the sacrifice of some of the larger aspects of economic progress, and are we willing to pay that price?

Some of those who elected the way of security in the arrangement of their personal affairs in recent years, studiously avoiding the *entrepreneurial* risk in their modest investment programs even at the sacrifice of a possible larger return, have had a discouraging experience in the disposition of their claims in the industrial reorganizations of the past few months. They may be pardoned

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for doubting the economists' tenet that risk and profit are bound up with the function of the *entrepreneur*. The position can be rationalized, of course. We are at the point of a major reorganization in which all may be affected, for better or worse, in seeking the general good. The prevailing rates for borrowing capital are lower. Real values have shrunk quite independently of any managerial policy or action. The capital structures of a decade ago are incongruous and crushingly burdensome as compared with present values and earning capacity. The preservation of any value or security in industrial obligations depends upon the survival, upon a reasonable and profitable basis, of the enterprise itself. Public interest, too, demands that the enterprise receive first consideration, as an employer and as a developer of the national economic wealth.

Granting the force and validity of these arguments, and reaffirming an abiding belief in the profit system,

it is still pertinent to raise the question whether commercial enterprise, having accepted relief from a considerable portion of its normal risks and the hardships they might entail, has not thereby surrendered a corresponding measure of its claim upon the rewards of risk.

In the case of many companies, even now, the question is still somewhat academic, for the profits are only hypothetical. But that is less generally true than it was a year ago, and we are definitely on the upward trend.

If we accept the principle that profits are at once the reward and the incentive for that type of enterprise willing to incur the risk of loss in order to put our national resources of man-power, money and materials to work in the active production of economic wealth, there are two ways in which the question might be asked. Both are fraught with tremendous importance to the nation at large, and to industry. Will a lower factor of risk justify limitation of the enterpriser's share

of the rewards? And will a limitation of the incentive discourage his initiative and activity to the point where development will be materially retarded and general production levels curtailed?

Puro Filter Corporation of America, 440 Lafayette St., New York City, is distributing an illustrated folder of water purifying and cooling equipment for household, office, and heavy duty use—bottle types, pressure coolers with tap or bubbler output, and special cabinet designs. The cooling unit is of the direct expansion type, using methyl chloride refrigerant. The filter-purifier units are built with a background of thirty years successful and satisfactory experience, and are available separately, in parallel installation, or in connection with a cooler so as to provide a complete self-contained unit.

A new folder entitled "Facts" has been prepared by the Stonhard Co., 401 No. Broad St., Philadelphia, summarizing in question and answer form some of the most important and generally asked points regarding the maintenance of heavy duty industrial floors, runways, etc., by the use of Stonhard resurfacing material.

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## PERSONALITIES in the NEWS

GUY OTIS BEALE has been appointed chief purchasing and stores officer of the Chesapeake & Ohio, Nickel Plate, and Pere Marquette railroads, succeeding the late W. G. Black. Mr. Beale has been in railroad work for more than a quarter century, his early experience being in the mechanical division, the past five years in purchases and stores.

FRANK R. ANDERSON, Purchasing Agent of the National Malleable and Steel Castings Co., was unanimously named a member of the East Cleveland, Ohio, City Commission to fill the unexpired term of Allen Clark, who is moving from the city. Mr. Anderson's term, under the city charter, expires in November of 1937. A past president of the Cleveland Purchasing Agents Association, Mr. Anderson has taken an active interest in municipal activities. He is a member of the management committee of the East Cleveland Y.M.C.A. and chairman of the membership committee.

EDWARD T. GUSHEE, Vice President in charge of purchases for the Detroit Edison Company, has been elected to the board of directors of that company.

R. D. TERRELL has been appointed purchasing agent for the City of Muskegee, Oklahoma.

J. ARTHUR GIBSON, for many years purchasing agent of the Simplex Wire & Cable Co., Boston, and for the past two years assistant treasurer of that company, has been named vice president in addition to his other official duties. Mr. Gibson is a past president of the New England Purchasing Agents Association.

FRANK J. LASKEY, formerly director of purchases for the Newton Steel Co. and the Corrigan-McKinney Steel Co., prior to the mer-



Frank J. Laskey

ger of these organizations with the Republic Steel Corp., and assistant general purchasing agent of Republic since the merger, has been named general purchasing agent, effective August 15th. ROBERT E. SHERRATT, formerly with the purchasing departments of LaBelle Iron Works, Wheeling Steel Corp., and Central Alloy Steel Corp., and more recently a buyer in the Republic organization, has been named assistant general purchasing agent.

CLIFF THORBURN, Purchasing Agent of the Pacific Electric Railway, and chairman of the Purchases and Stores Committee of the California Electric Railway Association, presided at a luncheon meeting of that committee in connection with the twentieth annual meeting of the Association at the Clift Hotel, San Francisco, August 4th.

THOMAS F. RODGERS, City Treasurer at Boise, Idaho, has been appointed to the recently created post of City Purchasing Agent.

FRANK TANNER has resigned as mayor of Eddyville, Kentucky, to accept the appointment as first assistant state purchasing agent.

JOHN R. PELS, first president of the N.A.P.A., who has for the past

several years been engaged in business in the Northwest, has taken over the management of the Pioneer Safe Deposit Vaults, Seattle.

FRED PYEATT, Secretary to the Mayor of Tulsa, Oklahoma, has been named acting purchasing agent for the city, following the resignation of JOHN B. MEANS in protest against a drastic slash in the departmental appropriation, which threatened to destroy the effectiveness of its operation.

WILLIAM S. PEPPERELL, formerly treasurer of the National Association of Cotton Manufacturers, has been appointed purchasing agent for the Burlington Mills, Greensboro, S. C.

WILLIAM E. DEXTER has been named purchasing agent for the City of Highland Park, Michigan, effective September 1. He takes over the purchasing duties which have been handled for the past three and a half years through the office of Mrs. Liliat F. Evans, City Controller.

EZRA Z. CARPENTER has been named purchasing agent and auditor for Franklin County, New York, succeeding the late J. Frank Kelley of Malone. Mr. Carpenter's appointment carries through the unexpired term of Mr. Kelley, from September 1, 1936, to December 31, 1937.

E. B. FIELIS was guest of honor at a dinner held September 10th at the New York Athletic Club, celebrating his service of twenty-five years as purchasing agent for the New York & Queens Electric Light & Power Co. More than a hundred company executives and members of his purchasing staff were present as Vice President L. A. Coleman presented Mr. Fielis with the gold service button. Mr. Fielis has been a member of the Purchasing Agents Association of New York since its inception in 1915 and is currently serving his twelfth consecutive year as treasurer of the association.

## Booklets

"What happens when you ship a package?" This question is pictorially answered in a 16-page booklet issued by the Railway Express Agency, 230 Park Ave., New York City, showing the extensive facilities and high degree of coordination in this nationwide organization, the safety and responsibility inherent in dealing with one carrier agency, and standard and special services available.

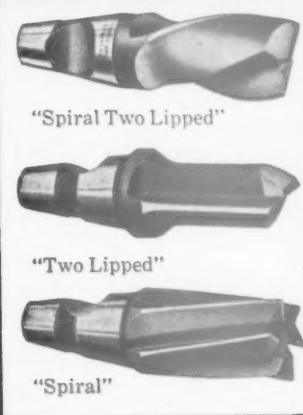
The C. O. Jelliff Mfg. Corp., Southport, Conn., has issued a new 6-page illustrated folder on wire dipping baskets in standard and special sizes and shapes, furnished in

steel, iron and galvanized, brass and copper, aluminum, monel metal, nickel, and nickel chromium. A useful feature of this folder is a concise summary of the properties of these various metals in relation to the solutions to be used, thus providing a guide to the selection of the most suitable material.

A 12-page illustrated booklet entitled "Genasco Products" and issued by the Barber Asphalt Co., Philadelphia, presents a comprehensive line of roofing, siding, waterproofing, industrial flooring and maintenance materials, with pertinent information concerning their properties and methods of application, and photographs of typical installations.



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# BUSINESS BOOK OF THE MONTH

SWEDEN: THE MIDDLE WAY, by  
MARQUIS W. CHILDS. Published by  
Yale University Press, New Haven, Conn.  
171 pages, illustrated. Price \$2.50.

**S**TRICTLY SPEAKING, this is not the newest of books, for the first printing is dated back in January of this year, but the ink is still fresh on its pages because, exhibiting a vitality that is rather exceptional among publications of this nature, Mr. Childs' brief record of controlled capitalism on the Scandinavian peninsula has run through several successive printings, climbed up on the best seller lists, and is currently more widely in demand than when it was first acclaimed eight months ago. There are several thousand people, it appears, who are interested in reading of experience and example rather than in debating continued experiment.

Nor is the subject an entirely new one, for this is a plain recital of a movement that has been going on, slowly at times and then again with increasing momentum, over a period of twenty years. Its roots go deeper than that into the past, but for two decades at least it has had sufficient form and unity of direction to emerge as a definite and significant phenomenon of our times. It is by no means a finished story—some of the basic principles of method are among the foremost issues of the general election to be held this fall, and its course may be checked, or deflected, or accelerated within the next few weeks. But already there is a solid record of achievement and a well established national trend that command attention.

Another factor that makes the book of specially timely interest now is the publisher's announcement that the growing list of readers contains two very well known names—President Roosevelt and Governor Landon—the assumption being that this little treatise is likely to have considerable influence in

shaping our own program of recovery and national policy, regardless of which of these two gentlemen will occupy the classic white house on the banks of the Potomac during the years immediately ahead.

Such an assumption, of course, might be very liberally discounted as the exuberant propaganda of an enthusiastic publisher. But the fact of the matter is that the Administration was sufficiently moved by the presentation to send a delegation of personal observers on a Scandinavian cruise this summer, charged with the query, "Is it true, what they say about Sweden?" And an informal report of this commission, appearing in the *New York Times* a couple of weeks ago, was to the effect that its members were greatly impressed by what they had seen and heard.

Consequently this picture of a domestic economy evolved in a land that is quite dissimilar to our own in many respects—size, location, climate, extent and variety of resources, and particularly in the temper of its people—assumes a very real significance in respect to our still unsolved problems of recovery, employment, production, agricultural adjustment, and social security.

It is a common viewpoint on the part of American observers of the foreign scene to dismiss the possibility of local application of European political and social forces on the grounds of these differences of national temper. It may be all very well, they say, for the Swedes, the Germans, the Russians, the Italians, but they add—complacently or disconsolately, as the case may be—that it can't happen here. Even the dramatic refutation of that slogan in Sinclair Lewis' novel of the same ironic title is generally

regarded as a somewhat fantastic concept, and we continue to view ourselves in the light of a chosen people, apart.

The viewpoint of Mr. Childs, while in no sense argumentative on this point, and leaving the reader quite free to draw whatever conclusions and make whatever applications he may choose, stresses the fact that the policies observed in Swedish national life have evolved from the inner needs of the population, realistically faced, with a minimum of imagination, and with a homely practical approach that is singularly free from the theory or the abstract idealism that have given rise to the driving enthusiasms and the sometimes blinding partisanship that characterize the Nazi, Fascist and Communist regimes in other European countries, as well as the highly social minded New Deal movement in our own land.

Differences of opinion, vigorous debate, deep seated struggle between consumer and producer groups, have marked almost every step of the way. It is pointed out, for example, that the original liquor control plan was passed with but a 51% majority. But there has been throughout a strong and dominating conviction that these internal differences must not be permitted to conflict with the one simple objective—the general welfare, and one of the most impressive features is the recurring analyses of the support accorded to various measures by different classes of the population, demonstrating how this step-by-step program for the common good has cut squarely across the traditional lines of class distinction.

The title, by the way, is not inspired by the technique of compromise through which much of the

progress has been achieved. It is a recognition of the belief that we are not faced with an arbitrary alternative as between collectivism and dictatorship, but that under the cherished system of private ownership and individual initiative which lies between, we may continue to find a satisfactory answer to the social and economic problems of the day, provided that this capitalistic system is guarded (against its own will if necessary) from indulgence in self-destroying excesses—particularly against the undue concentration of wealth, the acceptance of the profit motive as the first canon of industry, and monopolistic practices which are the mechanism of attaining these ends.

### Results

Has it worked? Well, there are no claims, either on the part of Mr. Childs or the people of whom he writes, that Sweden is a political or economic Utopia. The country has not been immune from the disrupting experiences of world-wide depression, and from very serious labor disturbances. The unemployment problem was acute in 1922-1923, giving rise to a public works program comparable in many ways to our own WPA and PWA, and again in 1933 a similar measure was authorized though it was found unnecessary at the last moment to put it into effect. But those crises were weathered with notable success and without materially affecting a living standard that is recognized as the highest in Europe. And the recovery of the past three years is one of the outstanding phenomena of our times.

Here are a few of the indicators, presented in the cold light of statistical analysis. Industrial production, above the 1929 level. Index of employment, around 98. Unemployed, less than 1% of the entire population, less than 4,000 in Stockholm, a city of half a million persons. Wages, virtually every trade fully organized and working under collective agreements at the highest scale in Europe, up 80% from 1913 to 1933 while the cost of living had advanced less than 50%.

Budget, balanced. Tariffs, consistently low. Rural electrification, better than 50% in a country that is still predominantly agricultural. Social security, an advanced program of old age pensions and unemployment insurance, the latter dating back only to 1934 as the situation was reasonably well in hand through a system of reserve public works and the very strong financial position of the trade unions, whose per capita wealth is by far the greatest in Europe. Purchasing power of currency, roughly double that of our dollar at current rates of exchange. Taxes, well—that's a long story, but the revenue is such as to maintain the integrity of the wage and to keep the little luxuries of life within reach.

Decidedly, this is a going concern. And the significant part of it is that the accomplishment has not involved the complete sacrifice of private property rights as required under a communistic regime, or by subjecting those rights and the privilege of individual initiative to an all-powerful dictatorship in a one-party rule as exemplified by Fascist and Nazi principles, though these two philosophies have pretty generally prevailed in neighboring countries. Sweden remains thoroughly democratic. The initiative and the decision at every step of the way has been through the orderly process of representative assemblies, and the organization of the co-operatives—a potent factor in the record—is likewise a demonstration of democratic conduct to the *n*th degree. Evolution and orderly change, such as are here described, are essentially democratic processes.

Part of the record is plainly attributable to special good fortune—a position of geographic isolation and a soil undevastated by war (America can find a parallel here), abandonment of the gold standard at a peculiarly strategic time, readiness to step into ready-made markets just when the Russian timber industry faltered and when the rich Saar valley was turned back to Germany. But the ability to capitalize these advantages, and to a large degree the fact of the circum-



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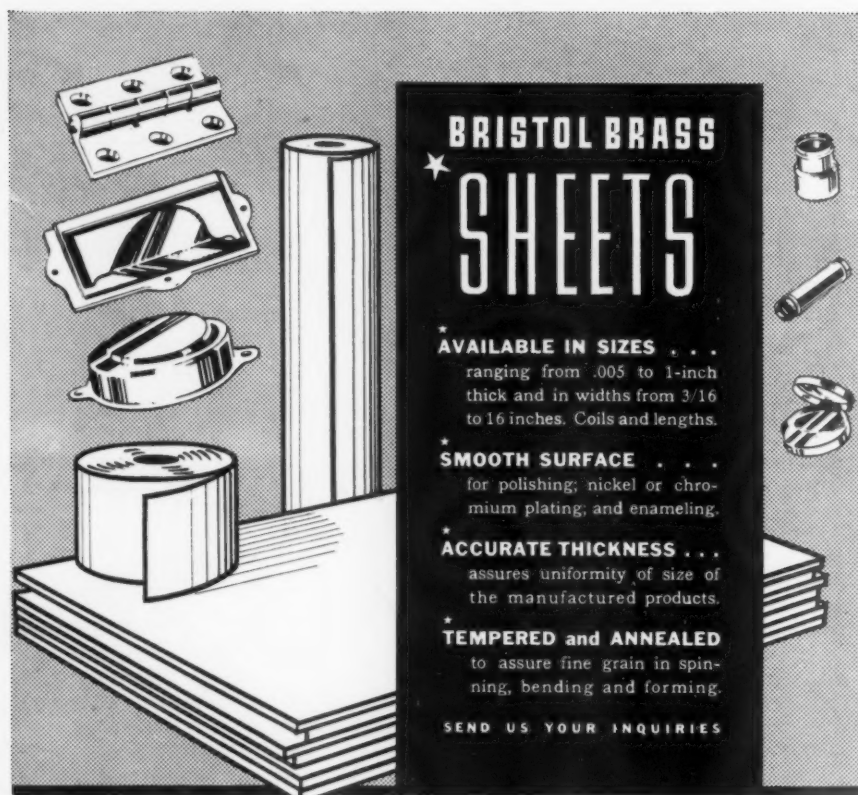
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stances themselves, is due to commercial and political sagacity. Mr. Childs quotes an old proverb: luck comes only to those who are ready for it.

### Methods

The story of how this favorable position has been won and held contains two points that are rather surprising when compared with the ordinary concepts of recovery.

(1) It is not the result of any complete social or political philosophy, which looks forward to a theoretical ideal or broad social pattern as an objective and proceeds toward that end in accordance with a set plan. Rather, the general condition is a by-product and summary of a score or more of individual projects, limited in scope but very definitive and practical in character—the price of bread and margarine, galoshes, electric light bulbs, the need for low cost housing, the development and distribution of power, the conservation and development of natural resources.

(2) It has been achieved with a minimum of dependence on legislative regulation, but rather with direct action using the mechanisms and methods of established competitive industry. The people believe in competition as a means of combatting the power of monopoly which is more than a bogey in cartel-ridden European markets. When a consumers cooperative tackles the bread question, it may go so far as to buy and operate a flour mill in direct competition with established concerns. The cost of distribution is attacked by the establishment of a very thoroughly organized chain of retail outlets utilizing the most progressive merchandising methods, strategic locations, attractive packaging and display; by actually taking over the second largest department store in the capital city; by competing in quality as well as in price; by setting up a wholesale organization in the regular manner.

And the government, too, is loath to depart from competitive forms. The state is on record as doubting

the efficiency of production under outright governmental ownership, and granting the private operator a clear advantage in export trade. Thus government interest in some industries is accomplished by placing the state in the role of the common stockholder; private ownership vested in the preferred shares thus continues in the form of a limited profit capitalism, still active in the management. State owned forests, primarily a conservation project, are administered strictly on a business basis, competing on even terms with the privately owned timber industry and paying taxes to the districts where operations are carried on.

### Initiative

It is apparent even at this stage of a very sketchy summary that the recovery of industry in Sweden has not been initiated or carried through by industry itself. Self regulation is quite capable of achieving the same results, but it is Mr. Childs' contention that self regulation has shown itself unwilling to operate along these lines, and has tended rather toward monopoly, excessive profits, throttling of the laws of supply and demand, undue concentration of wealth, all of which are eventually self-destroying. His interpretation of the Swedish prosperity, therefore, is that industry and the capitalist system has been saved, somewhat against its own will, by these two converging forces—the organized consumer, working constantly to narrow the range between cost of production and delivered cost of product, and the state, diverting excess profits into the public treasury, somewhat in a confiscatory manner in many instances, and thereby avoiding a multiplicity of taxation and securing the greater part of its public funds from the share which would otherwise go to capital.

There will be differences of opinion as to the validity of that interpretation, but the fact is quite clear that it has resulted in holding prices close to a true competitive level, sustained purchasing power and effective demand for the products of

industry, maintained a reasonable parity for the agriculturalist. Mr. Childs makes the broad statement that, as a result of these policies, Sweden is the only country today where *laissez faire* continues to exist, in the sense that the laws of supply and demand have not been practically invalidated by the spread of monopoly, public or private. It is, he admits, a sort of hothouse freedom of competition. It may be, he suggests, the only form in which the competitive system can survive, for the interruption has come at the point where monopoly in other lands has begun to distort the normal course of prosperous enterprise and enter upon a course of self-destruction.

There is little that is new about the program, if indeed it can be called a program since there is no set pattern or objective. Basically, it exemplifies the application of the low-cost large-volume policy that some of our own industries, on their own initiative, have practised with marked success. It is unique in its piecemeal approach, that has resulted in very uneven progress, and that has concentrated the painful (for this treatise would not concede them to be actually harmful in the light of general interest) effects of readjustment upon certain specific industries and distributor groups. It is unique in the cold logic that has dictated each move, whatever the immediate urgency of the situation. The work of the cooperatives has been largely impelled by price considerations. The state has more frequently cast about for additional revenue from the likeliest source—the wholesale tobacco trade was taken under control directly as a means of financing the pension system. There have been other motives. Liquor control was motivated largely by the same public interest that impels us to license the drivers of motor vehicles. The housing project was enthusiastically endorsed by public and by state, but the funds advanced by the latter were safeguarded by the strictest of mortgage security. On the whole, however, the program has centered around the fundamental problem of

the distribution of wealth while maintaining a capitalistic society.

It is not likely that this picture of the government in business, or the assumption of distribution and manufacturing functions by consumer groups, will appear in a too attractive light to business men. But other aspects of the picture are decidedly interesting—the maintenance of purchasing power, demand, and industrial activity. Balancing the two, it may be possible to get some estimate of the real cost of recovery, or perhaps the cost of preserving the system of private industry. Bound up, as Swedish trade is, with the radical developments that have completely altered the industrial complexion of Europe over the past few years, the latter statement may not be too extreme.

#### Cost of Recovery

That cost, as Mr. Childs visualizes it, involves a social outlook in practical terms of dollars and cents, income and purchasing power, manufacture primarily for use, and utilization of surplus in some way to prevent accumulation to the point of stagnating the flow of trade. Here is one method that has succeeded. It may not be the only way; in particular, the initiative need not be from the sources here described—a process that has entailed a considerable sacrifice of industry's own accepted prerogatives. But the results are there for all to see, and they continue to impress observers.

If they are impressing the great body of the public to the point of inducing some similar action, or if they are impressing the men and groups who will be responsible for our national policies over the next several years, it would seem to be the part of wisdom for industrialists, too, to expose themselves to the same impression. If that impression is sharp enough, it is certain that means will be found to achieve the results without invoking in our own domestic economy the drastic controls employed in its realization abroad. A compromise of mind and policy can be just as effective as a compromise of method.

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Position .....

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## Coal—Pittsburgh's Heritage

**THOMAS H. QUEER**

**Sales Engineer  
Pittsburgh Coal Co.**

NATURE'S ENDOWMENT of extensive, valuable coal deposits to Western Pennsylvania, pioneered and developed by the indomitable, courageous industrial spirit of our ancestors, is the foundation upon which has been built this world renowned industrial center, Pittsburgh. A foundation so solid as to support its growth from a population of 464 in 1760, the year the first coal mine was opened, to its recognized position in the world today, as being, in proportion to its size, the busiest, most astonishingly productive, and wealthiest city on the globe.

That more rapid progress followed the discovery of coal here than in other parts of the world there can be no question, as history records the existence of coal before Christ, its use in the year 400, its commercial use in the 12th century and its use as a domestic or household fuel in the 14th century. It was not until the 16th century that a rapid increase in the use of coal began. History reveals the presence of coal on the North American Continent in 1672 and the first active coal trade on record on this continent was in 1749 when deliveries were being made from the north to New England ports. It was at about this time that production began in this country, in Virginia, developing before the turn of the 18th century into an active trade between Philadelphia, New York and Boston.

Pittsburgh, the name, was established in 1758; the borough incorporated in 1794, the metropolis then and still of Western Pennsylvania. Coincident with the discovery of coal in Western Pennsylvania in 1759 and the opening of the first mine in Pittsburgh in 1760, began the development of our rivers, the Ohio, Monongahela and Allegheny, with the building of the first boat. The first steam towing was not until 1845, preceding the beginning of railroad development by five years. Stage coach lines, however, were established to points east in 1804. The faith of our pioneering ancestors in themselves and in that for which they had been searching and sacrificing even their lives, is evidenced by the fact that the first school, with only twenty pupils, was opened in 1761. In 1803, thirty-three years after George Washington's first report (1770) on the coal in Western Pennsylvania, in which he stated that it appeared to be of the very best kind, the first shipment of coal from Pittsburgh was made. We wonder if even George Washington might have visualized a development approaching the present day.

By the year 1837, when Pittsburgh was lighted with gas, and the

population (including the suburbs) had grown to about 40,000, there were several mines in operation and it is from about this time that its march of progress began, picking up the name of "Iron City" in its stride in 1846, and continuing on, becoming known as the Steel Center of the World, and contributing its products, made basically from coal, to humanity and civilization throughout the world.

The Western Pennsylvania coal producing area, of which Pittsburgh is the center of activity, embraces Allegheny, Butler, Fayette, Greene, Mercer, Washington and Westmore-

---

*It is not too early to begin thinking about the 1937 convention of N.A.P.A. Pittsburgh, chosen as the convention city, occupies a unique and important rank in the American industrial scene. In this article, Mr. Queer traces the development of the coal industry which has given the city its popular nickname, but which has a more fundamental significance as the basis of steel making and the other diversified industries that have made the name of Pittsburgh known throughout the world.*

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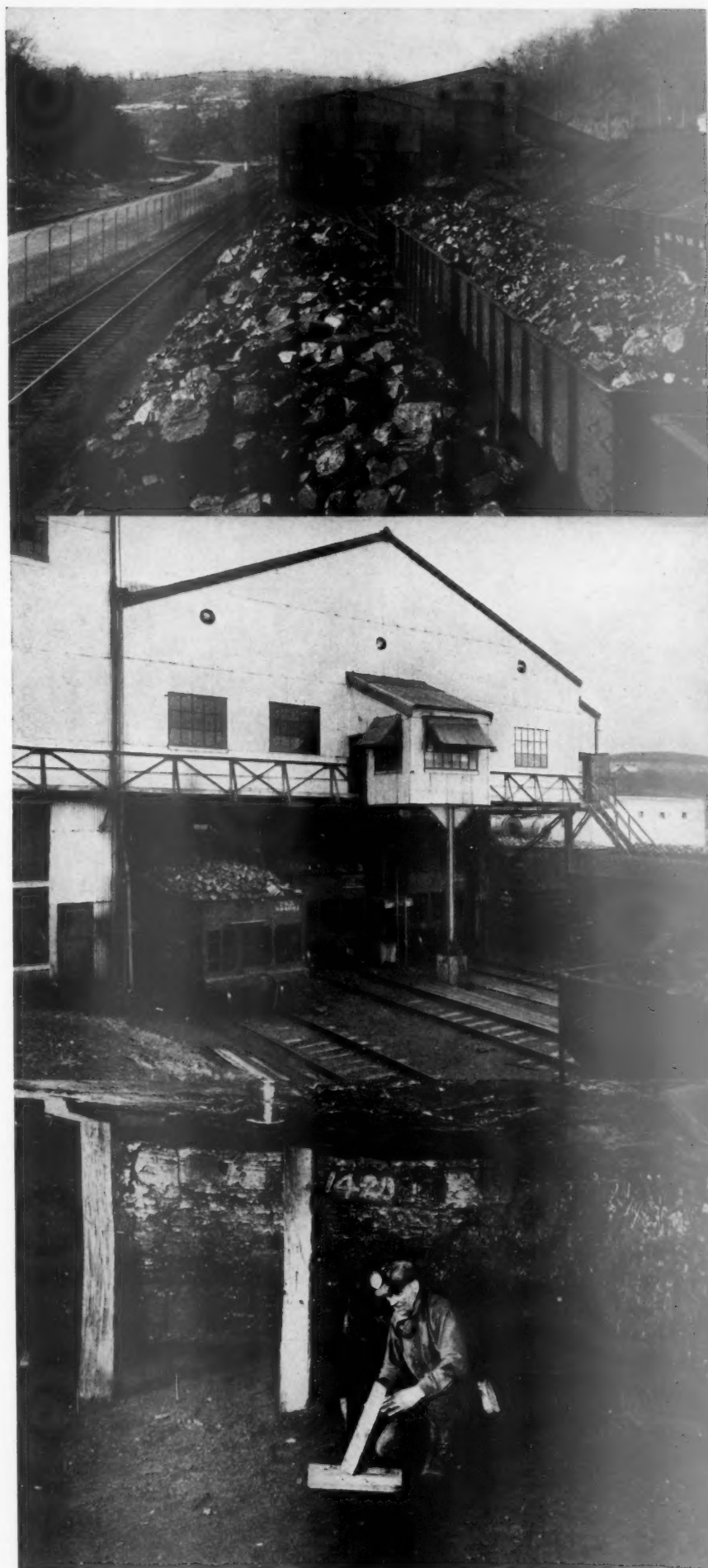
Typical scenes in western Pennsylvania coal fields. In the center photograph, several sizes of prepared coal are being loaded simultaneously. The miner in the lower photograph is setting posts to support the roof while coal is being recovered

land Counties. Because of the adaptability of the coal to such a variety of uses, its distribution is broad, reaching by rail, lake and tidewater movement far north into Canada, to New England in the east, Virginia and the District of Columbia in the southeast, west to the Dakotas, and by export to foreign countries throughout the world.

The production in 1929 was over 90 million tons, or better than 17% of the national production. In 1935, Western Pennsylvania produced approximately 55 million tons, or about 15% of the national production, from upward of 1,000 mines, operated by over 300 companies, including rail, river and truck operations, employing approximately 65,000 miners, with a payroll approaching \$100,000,000.

The captive tonnage, or tonnage consumed by the producing company or affiliates, represents approximately 40% of the district production of which a large portion originates along the Monongahela and Allegheny rivers. The captive river tonnage in 1935 was over 12,000,000, the commercial river tonnage being a little over 3,000,000. River transportation has advanced far from the early days—steel barges of 1,000 tons each in tows of ten is common practice. The new type river barges draw 8 to 9 feet of water, are 30 feet wide and 175 feet long. The Panama Canal total tonnage exceeded that of our rivers in 1935 only by about 6 million tons.

We have in the Pittsburgh district the world's largest producer of commercial tonnage, the Pittsburgh Coal Company; and the world's largest producer of captive tonnage, the United States Steel Corporation, who also operate at Clairton on the Monongahela river about 20 miles southeast of Pittsburgh, the





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world's largest by-product plant with a daily coking capacity of approximately 35,000 tons of coal. The Pittsburgh seam of coal, reputed to be the most valuable mineral deposit known to man, occurs throughout the greater part of this area, and from it is produced the greater portion of the tonnage. Other coal seams of prominence, particularly in the northern portion of the area, are the Twin Freeport, the Upper and Lower Freeports, and the Kittanning Seams.

Simultaneously, coal research and the development of our coal resources have progressed. The Pittsburgh Station of the U. S. Bureau of Mines with its experimental mine in the Pittsburgh suburbs, has contributed much to the welfare of the industry. At the experimental mine, explosibility of dusts and gases from various mining operations throughout the country have been studied, showing the way to greatly minimizing these hazards.

Carnegie Institute of Technology, the University of Pittsburgh, or the

Cathedral of Learning, the Mellon Institute of Industrial Research, are actively engaged in research on coal and its related subjects.

In 1926 the First International Conference on Bituminous Coal was held in Pittsburgh, having been organized by Dr. Thomas S. Baker, then President of Carnegie Institute of Technology, and attended by 1,700 delegates from all parts of the world. Along with the research and scientific studies being made by these various agencies, the coal companies themselves have made exhaustive research studies from which have arisen some of the most modern mining operations in the world. The preparation and application of coals have also been studied, resulting in a number of highly efficient mechanical preparation plants. The largest bituminous coal preparation plant in the world, producing 1,000 tons per hour, is operated at Champion, Pa., 20 miles west of Pittsburgh.

Frequently, nowadays, there appear in industrial reports, state-

ments showing the reduced coal consumption per unit of work in the various coal consuming industries, utilities, railroads, etc., representing an annual loss to the industry estimated between 70 and 100 million tons, which is attributed to more efficient combustion and to greatly advanced standards of coal preparation, quality and sizing. These higher efficiencies result from the combination of research studies made by various agencies, including the coal industry itself, of the characteristics of the coal, its adaptability, various refining methods to remove the impurities, efficient screening or size classification, and its application to burning apparatus. The coal industry's unselfish and generous contribution to the higher efficiencies in the use of its product may be regarded as a sacrifice in the interest of world progress.

The Pittsburgh district has from its beginning enjoyed a prominent place in the leadership of the coal industry, and since the obstacles of the present are no greater than those of the past, we are sure that the application to our industry of that creative ability which has characterized Pittsburgh and the Pittsburgh coal industry from its beginning, will retain for us the benefits of our heritage.

## Obituary

JOHN CRAVEN MCQUISTON, 78, for many years purchasing agent of the Santa Fe Railroad at Los Angeles until his retirement from active business ten years ago, died on July 8th. Mr. McQuiston was one of the founders of the Los Angeles Purchasing Agents Association, served as its first treasurer and was president in 1919-1920.

JOSEPH FERGUSON, 33, for the past three years purchasing agent for the Kansas City Club, died August 4th of injuries received in an automobile accident near Hugo, Colorado.

HOMER WHITMAN, 55, Purchasing Agent of the Hooker Electrochemi-

cal Co., Niagara Falls, N. Y., died at his home in that city August 11th, of a heart ailment. Mr. Whitman was a graduate of the University of Rochester, and served his business apprenticeship in the engineering departments of Westinghouse, Standard Electric Signal Co., Western Electric, and Roller-Smith Co. He came to Niagara Falls in 1912 and has supervised the purchasing for the Hooker organization since that time. A charter member and officer of the Buffalo Purchasing Agents Association, and chairman of the N.A.P.A. Chemicals Committee for several years, he was also active in civic and church affairs and in the alumni association of his University.

J. LAWRENCE PARKER, 43, Purchasing Agent for the Gas Service Co., Kansas City, Mo., died August 13th at the Research Hospital in that city after a brief illness. Mr. Parker served for nine years as assistant purchasing engineer for the Henry L. Doherty organization in New York City, and was assigned to Kansas City in 1925.

JOHN J. MURRAY, Director of Supplies for the City of Pittsburgh for the past several years, and an active member of the Pittsburgh Purchasing Agents Association during his term of municipal service, died August 15th.

CHARLES W. ROLLER, Purchasing Agent and controller of field expenses for the Union Central Life Insurance Co., Cincinnati, died at his home in that city on August 16th, after a three months illness. Mr. Roller was a lifelong resident of Cincinnati and had been with the Union Central for thirty years.

FREDERICK F. HASLACH, 53, Purchasing Agent for the National Sugar Refining Co., at the Long Island City plant since 1914, died August 22nd following an operation for appendicitis. Mr. Haslach joined the Purchasing Agents Association of New York in 1919, and served on the Executive Committee in 1932 and 1933.

## Booklets

The newly published silver anniversary catalog of the Colonial Supply Co., Pittsburgh, Penna., is an outstanding example of practical and useful presentation of an extensive and varied line of mill supplies. The bulk of the catalog has been reduced by about 50% as compared with former issues, by confining the text to important items carried in stock and subject to more or less constant demand by users, but eliminating the stereotyped listings of many items that are frequently cataloged merely from force of habit. A seven page alphabetical itemized index provides convenient reference to the 180 pages of descriptive and illustrative material, and a flexible cover with wire-o binding permits the catalog to lie flat, opened at any page, while in use.

Hand electric grinders for pattern and die shops, foundries, garages, and a wide range of manufacturing industries, are shown in a new illustrated 8-page booklet of the Dumore Co., Racine, Wisconsin. A variety of mounted wheels and points, abrasive bands and arbors, adapting the equipment to particular industrial operations and requirements, is also described.

An 8-page folder of the Continental Diamond Fibre Co., Newark, Del., presents a series of materials combining high mechanical and electrical qualities with moderate cost and wide adaptability. Vulcanized fiber in sheets, tubes, rods and fabricated parts; Dilecto, a laminated phenolic material, furnished also in sheets, tubes, rods, and machined, stamped, punched or molded parts; Micabond in flexible sheets, plate, tubing, tape, and punched or formed parts; Celoron, a laminated material of fabric and resin, particularly adapted to use in the form of silent gears; Cellulak tubes of kraft paper and resin; and Vulcoid, another laminated fibrous insulating material.

Bulletin 101 of the Edge Moor Iron Works, 30 Rockefeller Plaza, New York City, is an 8-page illustrated folder devoted to special equipment for the process industries, fabricated from steel, stainless and stainless-clad, aluminum, monel metal, nickel, Everdur, and Ni-clad. Among the products shown are acid storage tanks, fractionating towers, autoclaves, mixers, weigh tanks, jacketed kettles, tube nest and shell for heat exchanger.

The Burroughs Adding Machine Co., Detroit, has issued a descriptive folder on payroll accounting plans, with representative forms for compiling information required by new social security laws.



## THE OLYMPIC WINNER for FINE WORK "SILK GAUZE" MARATHON

It is no more true that every typewriter ribbon made of silk gives the same performance than that every runner is the equal of every other runner. Since they were introduced several years ago, Columbia "SILK GAUZE" Ribbons have been continually proving that they are definitely superior.

And now "SILK GAUZE" MARATHON is making new records. For "long distance" typing—for clean cut originals and carbons—for true quality and economy—Columbia's MARATHON is the Olympic winner of them all. It will wear two or three times as long as the average cotton ribbon and produce more and better \*carbon copies at the same time.

If saving time and money—if getting neater originals and clearer carbons is of interest to you, you will be interested in Columbia "SILK GAUZE" MARATHON.

\* This is of particular interest to users of billing machines where a number of clear copies are required.

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SPRINGMAKERS FOR MORE THAN THREE QUARTERS OF A CENTURY  
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SPECIAL DEPARTMENT FOR SMALL ORDERS · EXPERIMENTAL DESIGN CO-OPERATION

## AMONG THE ASSOCIATIONS

**Milwaukee**—Preliminary announcements from the school of business administration at Marquette University include plans for a class in industrial purchasing under the sponsorship of the **Milwaukee Association**. The classes are to be held from 7:30 to 9 o'clock on Wednesday evenings, under the general supervision of Prof. George Nick, supplemented by lectures on special topics by members of the Association.

**Springfield, Mass.**—Supplementing the announcement which appeared in this column last month, plans have been completed for an intensive educational campaign on the benefits of centralized purchasing in governmental units, jointly sponsored by the **Western Massachusetts Association**, the **New England Association**, and the **Worcester County Purchasing Agents Club**. The program calls for a series of meetings to be held in Boston, Worcester, and Springfield, Mass., on October 13, 14 and 15, at which Joseph Nicholson, Purchasing Agent for the City of Milwaukee, will discuss the subject from his background of long and successful experience in the field. Strategically scheduled shortly before the election period, at which matters of governmental policy and organization are uppermost in the public mind, the cooperation of taxpayers groups, municipal leagues, and the daily press, in these Massachusetts centers have been enlisted, and public officials have been encouraged to attend the meetings and participate in the discussion. The campaign, however, is not conceived or conducted on a political plane. It is basically an educational program, tying in with the N.A.P.A. project on the same subject and supplementing a highly successful series of meetings held just about a year ago in which much interest was aroused.

### AUGUST 6

**Salem, Ohio**—Golf tournament and dinner meeting of the **Canton & Eastern Ohio Association**, at the Salem Golf Club.

### AUGUST 11

**Detroit**—Golf Tournament of the **Detroit Association**, at Franklin Hills.

### AUGUST 13

**Seattle**—Annual golf tournament of the **Washington Association**, at the Rainier Golf & Country Club. C. R. Bean was chairman of the committee in charge.

**Kalamazoo**—Luncheon meeting of the **Kalamazoo Valley Association**, at the Columbia Hotel. G. A.

Boss presided. The meeting was devoted to a discussion of trade material received from N.A.P.A. headquarters.

#### AUGUST 15

**Algonac, Michigan**—Annual basket picnic of the Detroit Association and families, at the Springman cottage.

**Cleveland**—Annual family picnic of the East End Buyers Club at Fell Lake. The committee: *Chairman*, H. A. Parker; Vince Cada, George Stalley, Ray Frey, and Tony Sprohm.

#### AUGUST 20

**Cleveland**—August golf tournament of the Cleveland Association, at Columbia Hills. The committee: George Stolpman and Al Koch.

#### AUGUST 28

**Buffalo**—Plant visitation by the Syracuse & Central New York Association, at the new Lackawanna plant of the Bethlehem Steel Co. Inspection of the continuous mill during the forenoon. Luncheon at the plant. Afternoon at the cold drawing plant of Bliss & Laughlin Steel Co. Golf, and dinner meeting.

### Directory of Testing and Research Laboratories

The National Bureau of Standards has just issued a new and revised edition of the Directory of Commercial Testing and College Research Laboratories. Designated as Bureau of Standards Miscellaneous Publication M125, it can be obtained from the Superintendent of Documents, Washington, D. C., at a price of 15 cents per copy.

Of essential value to purchasing agents in connection with the use of specifications, particularly in the case of companies without the facilities to make their own acceptance tests, the first 20 pages present a geographical list of more than 300 independent commercial laboratories, together with a code index showing by alphabetical symbol the type of tests each one is equipped to make, and by numerical code the range of materials they can handle.

The second section contains a geographical list of college research laboratories, also coded to show their technical facilities. Such laboratories generally do a certain amount of work for public institutions, state and municipal agencies, but practice differs widely as to their availability for commercial investigations. In view of this situation, the name of the director in charge has been included in each case, as a reference for buyers wishing to use these services.



## Countless Products are Made Better and More Economically with "PRODUCT-IZED" Strip Steel

● "Product-ized" strip steel means Acme Superstrip. The reason is that Acme Superstrip is produced each time to meet the specific needs of the specific product.

Some products require a particularly fine surface—in others, deep or difficult drawing is the problem. Often it is a combination of several requirements.

● Electric refrigerator part manufactured from low-carbon Acme Hot Rolled Superstrip. This part was deep drawn cold, including the flange with no process heat treatment.



● Automobile bumper guard—made from cold rolled Acme Superstrip. This is a deep draw with a fold at the sides. The finish of the completed part must be suitable for chrome plating.

So well has Acme Superstrip met the needs of important manufacturers in many different fields, that the preference for this "product-ized" strip steel is mounting steadily.

Let us send you a copy of the booklet, "Batting 'Em Out," describing many interesting uses of Acme Superstrip. ACME STEEL COMPANY, General Offices, Chicago. Branches and Sales Offices in Principal Cities.

# Acme Superstrip

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Send me a copy of the booklet, "Batting 'Em Out.'"

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Refiners and Makers  
of  
**ABRASIVE GRAINS**  
AND  
**FLOURS**

AMERICAN ABRASIVE COMPANY  
WESTFIELD, MASS.

## A Purchasing Manual

(Continued from page 11)

price fluctuations to demand and to trade cycles, indicating how such factors affect purchasing policies. It relates prices to costs, affirming the supplier's reasonable expectation of a profit provided he keeps his own costs and operations on an efficient level. The logical corollary to this is the necessity of efficient buying to keep costs down and to place the purchaser's own company in a position for such efficient operation. Price is an essential factor in the buyer's deliberations.

Chapter 9, Trial Orders and Free Samples, explains company policy on a matter which is reserved for the central purchasing office in Pittsburgh. In general, the company holds that anything worth trying is worth paying for, and free samples are accepted for trial only when the value is less than the cost of the paper work involved in completing a purchase. The approved procedure is to issue an order, clearly marked as to its trial nature, and with a special clause specifying the trial period agreed upon and making provision for the return of the material if it is unsatisfactory. Within the organization, the regulation calls for a detailed report on the results of the trial and progress reports checked against the expiration date.

Chapter 10, Repair Work and Free Service, explains the meaning and the importance of the liability clause printed on the company's standard order form, and the necessity for issuing a new order with this same protection for any work done after completion of the original order.

Chapter 11 furnishes a draft of a lease form to be used to cover the rental of company equipment to other concerns, these agreements being made by the purchasing department.

Chapter 12 gives special instructions for the handling of orders issued to suppliers outside the United States (all placed from the Pittsburgh office) and gives the pre-

vailing terms covering such orders.

Chapter 13 covers contract purchasing and long term orders. These must be approved and signed by the purchasing agent before they are binding upon the company. Instructions are also given for ordering against the blanket contracts arranged by the central purchasing department, each district purchasing agent being supplied with a copy of all contracts applying to his district.

Chapter 14 outlines the procedure with regard to surplus and obsolete materials, which are handled through the Surplus and Transfer Division of the purchasing department. A master list, alphabetically arranged by materials and works, is maintained and a copy furnished to each district purchasing agent and storekeeper. Transfer orders are handled just like any other purchase order. All requisitions sent to Pittsburgh are checked against this list before being distributed to the buyers, for the possible utilization of some material on hand instead of making a new purchase.

Chapters 15 to 22 are devoted to the proper handling of the various forms used in the purchasing process—Purchasing Department Requisition, Request for Quotation, Purchase Order (including the correct shipping instructions for carload and L.C.L. freight and express shipments to each of the plants), Emergency Pick-up and Petty Cash Orders, Follow-up and Tracing Orders, Shortage or Defective Reports, Invoices, and Purchasing Department Records. Each of these sections is supplemented with actual specimen forms properly filled out.

A section of "Special Instructions" is incorporated at the end of the manual. This contains four divisions.

The first outlines the procedure to be followed in the procurement of automotive equipment.

The second lists some fifty cleaning materials which have been tested in the Aluminum Research Laboratories and found suitable and safe for use on aluminum products.

This is included for its informative value only and is not presented in the form of a recommendation nor with any suggestion as to their relative efficiency. Neither does it claim to be an exhaustive list. It indicates the form of the cleaner, whether in flakes, powder, chips, bars, or liquid form; whether soapy or non-soapy; whether adapted to plain or anodized aluminum, or both; also the name and address of the manufacturer.

The third section concerns the properties and trade customs relating to copper, another material which is purchased only through the Pittsburgh office.

The final section deals with office supplies and equipment, which are separately handled. Stock forms are carried in a central stationery storeroom at New Kensington, attached to the accounting department, and are issued upon order in a monthly letter to that point instead of by requisition to the purchasing department. Purchases of office machinery require the prior approval of the Auditor. The regulations governing repairs and rental or office machinery are also included here.

Thus in about sixty pages, the major points of company purchasing policy and procedure are clearly summarized, providing a basic guide to the coordination and efficient conduct of buying activities throughout a scattered organization that nevertheless has a unified purpose and objective in the effective administration of the materials budget and the maintenance of an efficient service of supply for the operating activities of the company. Nor is its usefulness confined only to the direction of purchasing at distant locations; it sets up definite standards for the whole staff of buyers at headquarters as well.

The plan can be adopted with salutary results in many another purchasing department which may differ in many respects from the Aluminum Company set-up. It may be simpler, or more extensive. The details of procedure would naturally be revised to conform with accepted practice. The relative im-



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**THE L. S. STARRETT CO.**  
World's Greatest Toolmakers  
 Manufacturers of Hockens Unexcelled  
 Steel Tapes—Standard for Accuracy  
 ATHOL, MASS., U. S. A.

portance of the various sections might also be subject to some difference of opinion.

The greatest obstacle in compiling such a manual is frequently the appalling amount of mechanical work involved in preparation of the first draft. It is hard to know where to begin, and where to stop. But with a successful model or outline at hand, and with the eminently practical form here devised—a series of concrete discussions on topics of immediate and essential importance, which can be arranged as desired and amplified or revised to achieve the desired effect and the most effective form for actual use—

that difficulty is largely eliminated.

The manual modestly refers to the standard records and forms as the actual tools of good buying. It is in itself a highly effective tool for smooth and resultful departmental operation.

The Hinde & Dauch Paper Co., Sandusky, Ohio, has issued a new folder announcing and showing four special corrugated shipping boxes designed for the Christmas trade and featuring stock designs in color particularly appropriate to the holiday season, thus providing a distinctive visual and gift appeal that adds much to the merchandising effectiveness of the package.

# NEW PRODUCTS & IDEAS

## SIGNALING UNIT

No. 268

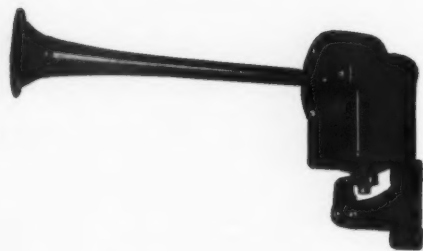
**F**OR GIVING code signals or paging personnel in industrial plants and yards, where noise and disturbance interfere with ordinary signaling methods, this unit produces a non-synchronous trumpet blast that will penetrate shop noises. The mechanism is enclosed in a weatherproof cast-iron housing, and a swivel bracket mounting permits directional control of the signal. Operates on 110 or 220 volt circuits, 50 cycles or higher, and can be connected in series or parallel.

*See coupon below*

## WICK FEED OILER

No. 269

**I**MPROVED DESIGN of this wick feed oiler has substituted nonbreakable Tenite, a transparent synthetic material, in place of the glass housing previously employed, so that the oil level is still



entirely visible but without the danger of breakage in service. The wick is wound around a central stem and projects slightly beyond the fitting. Available in a variety of styles to suit machine and space requirements. The unit shown is 2 $\frac{3}{4}$  inches in overall height, 1 $\frac{1}{4}$  inches in diameter, uses standard  $\frac{1}{8}$  inch pipe thread connections, and holds approximately a 9-hour supply of oil.

*See coupon below*

## CALL SYSTEM

No. 270

**B**Y USING the microphone, control board, and loud speakers shown in the illustration, it is possible for an operator in the office to locate an executive and convey a message to any part of the plant. The typical installation places the microphone at the telephone switchboard, with call stations at various points in the plant spaced so that one can never be entirely out of range of hearing, the number of stations depending on the size of the plant. The equipment is easily installed and is economical and effective in operation.

*See coupon at left*



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Please send complete data on the New Products listed by number below:

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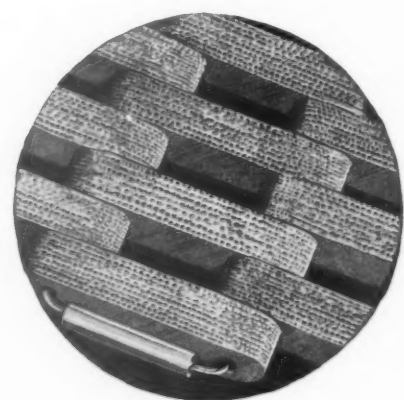
City ..... State .....

PAGE 48

## FLOOR MAT

No. 271

**A** NEW TYPE floor mat designed to provide secure footing, eliminate slipping hazards, and prevent the foot fatigue frequently resulting from hard flooring, is made of cotton cord links impregnated with rubber and woven on rust-proof spring steel wire. This construction results in soft resiliency and freedom from slippage, plus extreme durability and ease of cleaning, at moderate cost. The mats are available in standard stock sizes, and on order in special sizes of any desired width and length.



PURCHASING



## INDUSTRIAL SIZE PACKAGE OF "GOLD DUST"

No. 272

**E**CONOMIES in buying and convenience in handling are achieved by the introduction of industrial size packages of this all-purpose cleaner adapted for general factory use. The new drums are of 25-pound and 50-pound size, as compared with the household size packages heretofore available. The cleaner itself is highly alkaline, cuts grease and oil effectively, removes odors, and has antiseptic properties that guard against the spread of disease. Useful for lavatories and washrooms, windows, walls, painted woodwork, and floors of wood, concrete or composition.

See coupon page 48



## V-BELT COUPLING

No. 273

**T**WO FORMED steel stampings and a link of roller chain are the basic elements of this new coupling for cord or fabric V-belts—a development of major importance in view of the increasing use of this power transmission method. The stampings are attached to the ends of the belt under pressure, a set of coup-

**Speedy and Accurate Hand Sawing**



is now possible. This revolutionary, heavy duty hack saw frame, drop forged from hard aluminum alloy has changed the entire hack saw picture. Absolutely rigid with machine-type blade holders, it holds an unbreakable, high-speed-edge blade at machine tensions. Double handed grips increase power and accuracy. Improved design applies power below the line of cutting and prevents the blade from sticking in the cut. Try it and you will be satisfied with no other. Your dealer will demonstrate.

Write for **ARMSTRONG-BLUM MFG. CO.**  
Circular "The Hack Saw People"  
360 N. Francisco Ave. Chicago, U. S. A.

**MILES** shrink to inches...

**HOURS** to minutes

with shipments by **AIR EXPRESS**

Super-speed deliveries of almost everything you order can best be made by *nation-wide* Air Express—2500 miles overnight—*directly* to 215 cities in the United States and Canada. Also, by swift hook-in at these points with fast rail express to 23,000 offices, the continent is right under your thumb. For Latin-American shipments, Air Express covers 32 countries at low rates and the fastest possible speed.

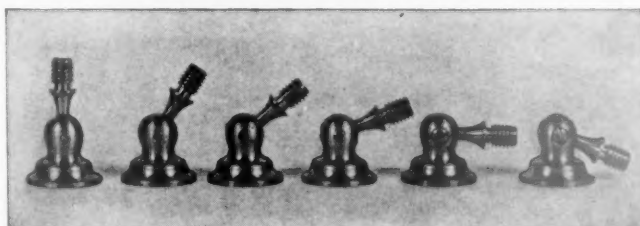
- \* Day and night service.
- \* Pick-up and delivery free.
- \* \$50 insurance included in the cost of each shipment.
- \* C. O. D's. with prompt remittances.
- \* Packing requirements simple.
- \* One waybill. One organization. One responsibility.

For service and information, phone any Railway Express office.

# AIR EXPRESS

DIVISION

RAILWAY EXPRESS AGENCY



## "Swivels"!

Brass swivels for fountain pen receivers. Base turned, slotted and drilled; tongue turned, machined, drilled and threaded.

Nothing spectacular about any one operation; but the whole had to go together at good production speed (to keep the price consistent) and still arrive at the customer's in smooth working order.

Perfect-working jobs like this are a regular part of "Peck Service."

PECK SPRING CATALOG

containing much valuable information on springs and screw machine parts sent on request.

# PECK SPRINGS AND SCREW MACHINE PARTS

The Peck Spring Co. - 10 Walnut St. - Plainville, Conn.

# PLAY SAFE!

## Buy SAFETY EQUIPMENT from a dependable source ... PULMOSAN!

Safety equipment is bought to protect life and health. "Cheap" or unknown devices often fail to do this.

Play safe!

Buy from Pulmosan and be certain of dependable, tested, approved safety devices. "Everything for Industrial Safety" sums up the completeness of the Pulmosan line. A few products are:

Respirators	Safety Ladders
Goggles	Safety Clothing
Hoods, Helmets	Safety Tools
Masks	Machine Guards
First Aid	Safety Bulletins
and hundreds more!	

Write for Information and Prices

**PULMOSAN SAFETY EQUIP. CORP.**  
DEPT. P, 176 JOHNSON STREET      BROOKLYN, N. Y.

## Use OAKITE MAINTENANCE AND PRODUCTION Cleaning For ECONOMY... EFFICIENCY... BETTER RESULTS

You will probably never need more than two, three or four Oakite materials, but IT IS IMPORTANT to you that more than

### 50 Different Oakite Materials

are available. It means that you get materials designed specifically for the particular types of cleaning you want to do... materials that do their respective jobs effectively, with complete safety and at low cost.

For greater cleaning efficiency and economy, take advantage of our quarter century successful experience serving leading industrial concerns. Tell us your problems.

**OAKITE PRODUCTS, INC., 54 Thames St., NEW YORK**  
Branch Offices and Representatives in All  
Principal Cities of the U. S.

SINCE 1909  
THE STANDARD  
OF CLEANING  
QUALITY

# OAKITE

SPECIALIZED INDUSTRIAL CLEANING MATERIALS & METHODS

ling tools being provided for this purpose, the larger sizes for heavy duty service being further anchored to the belt by means of trailers. Adaptable for standard belt sizes A to G. The principle is the same in each case, but a self-lubricating rawhide pin is used in size A, while the larger sizes are fitted with case-hardened steel raceways which enclose concave-sided link pins and free steel rollers. The assembly operates satisfactorily over flat pulleys or V-sheaves, is smooth and silent in use, requires no lubrication, and can be quickly coupled on heavy machinery installations without disturbing shaft bearings or disassembly of the machine.

See coupon page 48

## CHAIN LADDER



No. 274

**C**OMPACT, RELIABLE, and with a capacity of 1,000 pounds, this chain ladder fire escape is adapted to use in various industrial applications. The side members are of link chain, supporting metal rungs, the whole assembly, in any desired length, being conveniently housed in a metal box secured to the window or other opening. The device has been in successful use for some time in hotels and public buildings.

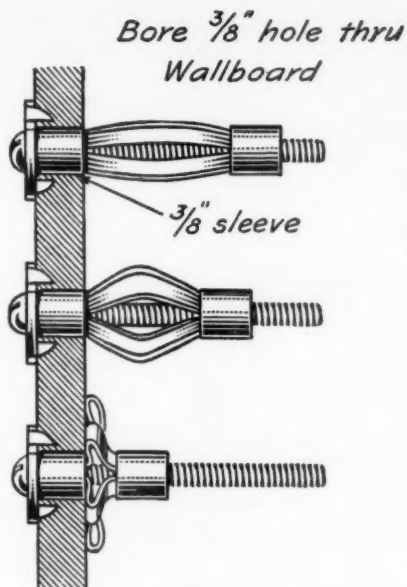
See coupon page 48

## STEEL DESKS



No. 275

**D**ESIGN EFFICIENCY to conserve the time and energy of the worker, whether executive, department head or clerical operator, by making the tools of business instantly available in neat and orderly form, has for many years characterized this line of office desks. The same features are now provided in the strength and permanence of steel construction, with a spot welded center reinforcing frame that prevents weaving and keeps the pedestal true in spite of the heaviest loads. Card drawers are reinforced to support a weight of 200 pounds when fully extended. The top plate is of 16-gauge steel, reinforced at seven points with Z-bar and channel reinforcements, spot welded to the frame. Eight leg design on double pedestal desks prevents vibration.



## SCREW ANCHOR FOR THIN MATERIALS

No. 276

**THIS NEW SCREW** anchor is designed for use with wallboard or other thin wall materials. It is available in three sizes—for  $\frac{1}{8}$ ,  $\frac{3}{16}$ , or  $\frac{1}{4}$  inch screws, and with sleeves  $\frac{3}{8}$  or  $\frac{7}{8}$  inches in length. The anchor is inserted through a properly positioned hole, and by turning a screw, the nut at the rear of the assembly is drawn forward so as to spread the expansion sleeve and anchor the whole device with a positive grip. The screw can then be removed and it is ready for the attachment of the desired object.

See coupon page 48



## TROUBLE LAMP

No. 277

**THIS PRACTICAL** trouble lamp is featured by a double outlet tap inserted in the cable two inches below the handle, thus providing a convenient means of connecting electric tools, etc., required in repairs or adjustments, and obviating the necessity of bringing a second cable from some distant outlet to the point of use. The lamp itself is equipped with heavy duty wire guard and hook, cadmium plated reflector, rubber grip and push-through switch in handle. Standard lengths of 12, 20, 25 and 50 feet of rubber covered flexible cable.

See coupon page 48



## OIL-RESISTING AIR HOSE

No. 278

**CONSTRUCTION** of this pneumatic hose is such as to afford maximum resistance to the various hazards encountered in severe service, such as in mines, quarries, rock industries, road

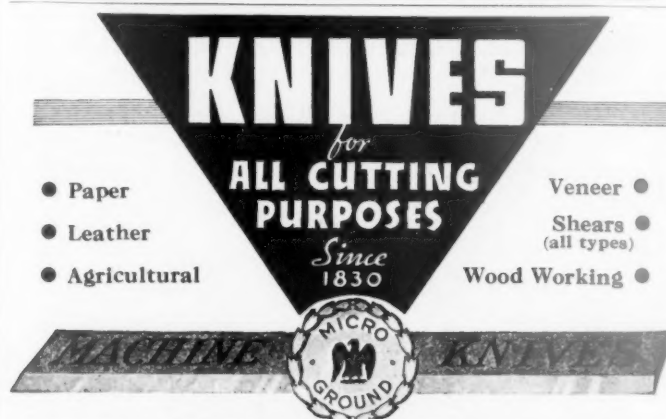
## TRANSPARENT CELLULOID (Non-Combustible) SHOP ENVELOPES



Provide visibility and at the same time protection against water, oil, grease, and dirt. Keep records clean and in full view throughout the entire manufacturing operation.

Made in any size or style required.  
Send copy of your form for sample envelope and complete details.

**JOSHUA MEIER, Inc.**  
48 New Chambers Street New York, N. Y.

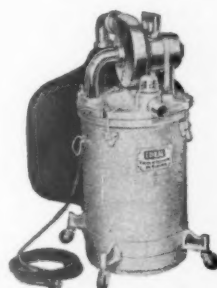


LORING COES COMPANY, Worcester, Mass.

"Pieces in Tank—Money in Bank"

**IDEAL**

## TANK TYPE PORTABLE INDUSTRIAL CLEANER



SPRAYS  
BLOWS  
VACUUMS

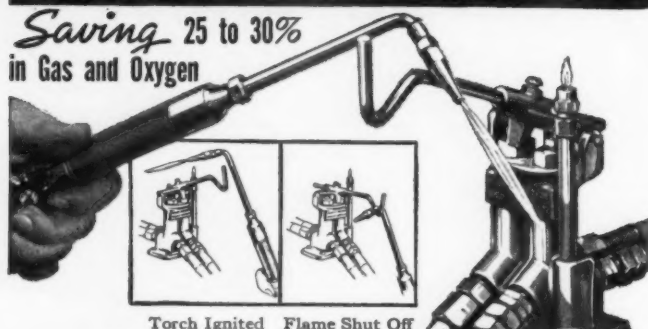
Pieces and heavy waste go to the tank, preventing damage to the bag. A 276 m.p.h. air stream moves dirt and metal shavings from hard-to-reach places. Full 1 h.p. motor—46 $\frac{1}{4}$ " vacuum lift. Write for FREE TRIAL offer.

**Ideal Commutator Dresser Co.**  
1040 Park Ave. Sycamore, Illinois

# WELDIT Gasaver

AUTOMATICALLY SHUTS OFF FLAME BETWEEN WELDS

*Saving 25 to 30%  
in Gas and Oxygen*



Torch Ignited Flame Shut Off

Between welds the workman hangs his torch on handy lever rod of Gasaver. Weight of torch pulls down lever rod closing valves in Gasaver, automatically shutting off both gas and oxygen intake lines. No wasted gas or oxygen, no burning flame between welds. As torch is lifted off level rod, oxygen and acetylene are released and instantly ignited to the pre-adjusted flame, ready for work. Cuts costs, increases production. Used in America's largest plants.

Price only \$10.00

Try Gasaver in your own plant two weeks free. If you are not satisfied, return at our expense. If you wish to keep it just O. K. our invoice (\$10.00) for payment.

**TEST THIS  
WELDIT GASAVER  
FOR TWO WEEKS  
FREE IN YOUR PLANT**

**WELDIT ACETYLENE CO.** 630 BAGLEY AVE.  
DETROIT, MICH.

BUY HOTEL ACCOMMODATIONS  
AS YOU BUY YOUR MATERIALS...

and you will choose the  
**HOTEL MONTCLAIR**

"The truly American Hotel with  
American Traditions"

Lexington Ave. at 49th St., New York City

**C**OMPARE feature for feature, and you, too, will agree that the Montclair is the best hotel "buy" in New York City.

This modern hotel is convenient to the railroad terminals and the business sections—is just a few blocks from famous Radio City, the Gay White Way, and the shopping districts. (That means saving time and taxi fares.)

You will thoroughly enjoy living in the light, cheerful rooms. You will find the service courteous, unobtrusive, and the prices for meals unusually attractive. Why not make your next visit doubly pleasant by staying at the Hotel Montclair?

**OUTSIDE ROOM WITH BATH,  
SHOWER AND RADIO**

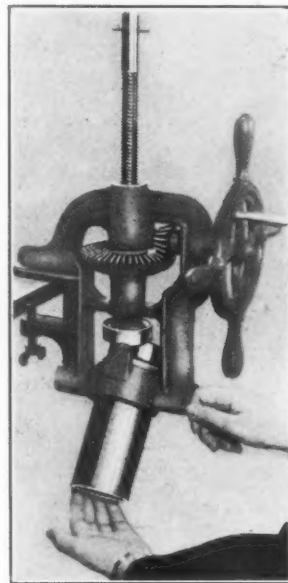
**SINGLE from \$2.50 DOUBLE from \$3.50**

Dine and dance at the Montclair's famous and colorful restaurants

work, contracting and general industrial use. To combat the deteriorating effects of hot oil from air compressors, the tube is made of a compound similar to that used in oil conducting hose, and it can actually be saturated with oil for extended periods of time without affecting its serviceability. Resistance to heat, high pressure, abrasion, cutting, and exposure is achieved by constructing the plies from specially twisted cord thoroughly impregnated with a tenacious rubber compound. The process does not impair the flexibility of the hose.

See coupon page 48

## HAND EXTRUSION PRESS



No. 279

**A** HAND OPERATED extrusion press for use with plastic material is fitted with a vertical cylinder  $2\frac{7}{16}$  inches in diameter. The extrusion die plate is inserted from the top and supported by an internal shoulder at the bottom of the cylinder. The operation of the hand wheel forces a piston into the cylinder on top of the material to the point where further piston travel is stopped by a pin, indicating that the material has all been emptied from the cylinder. By means of a hinged assembly, the cylinder can be tilted for removal, reloading, die change, or cleaning. Overall dimensions of the unit are  $13 \times 14\frac{1}{2}$  inches, 24 inches in height.

See coupon page 48

## FOAM MAKING NOZZLE

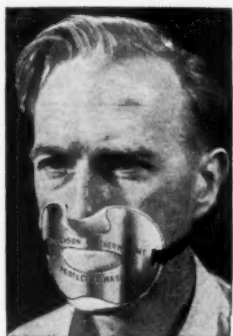


No. 280

**A** SIMPLE MECHANICAL device for making foam in fighting flammable liquid fires consists of a patented nozzle attachable to any water line supplying 75 pounds or more pressure. As the water passes through this nozzle it automatically draws in air and a new foam-making solution which is carried by the operator in a hip pack. There are no adjustments or moving parts, the proportions being automatically regulated. One person can

operate the equipment alone and only about 20 gallons of water per minute are required. One gallon of the solution makes 350 gallons of foam, and by replenishing the solution in the hip pack, continuous foam production of 300 to 400 gallons per minute can be sustained. A water stream for use on lingering flames in ordinary combustibles is obtained by merely lifting the pick-up tube out of the solution.

*See coupon page 48*

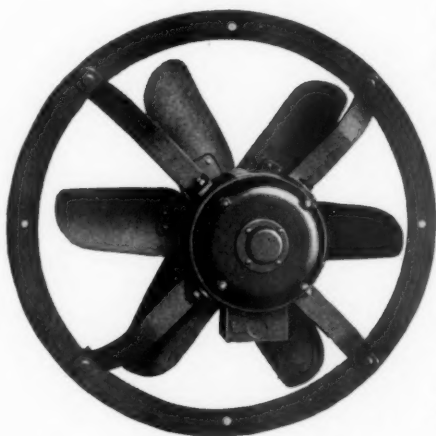


## RESPIRATOR

No. 281

**P**ROTECTION AGAINST dust is provided by this feather-weight mask of pliable aluminum fitted snugly to the face and carrying a sterilized cotton gauze replaceable filter. The mask is designed to permit free breathing and does not interfere with vision or with conversation. It is not recommended for use against vapors, gases or toxic dusts, but has an efficiency of 85% on fine silica dust and up to 97% on coarser dusts.

*See coupon page 48*



## EXHAUST FAN

No. 282

**A** NEW LINE of ventilating fans, applicable for ordinary exhaust systems as well as for air conditioners and unit heaters, has six wide and heavily pitched Dural blades, driven by a totally enclosed splitphase motor, single speed, operating on 110 volts, 60 cycles. A special thrust bearing permits either vertical or horizontal mounting.

*See coupon page 48*

## ANTI-CORROSIVE AGENT

No. 283

**C**ORROSION OF incandescent-lamp bases in outdoor lighting systems, subways, cellars, acid-laden atmospheric conditions, salt air, etc., can be combatted by the simple means of applying to the threaded portion of the lamp base a film of colloidal graphite, suspended in water. The application can be made by brushing or spraying, and when dry this provides a tenacious film that is both an effective dry lubricant and an anti-corrosive agent.

# Campbell TAGS

**A Grade and Color for Every Tag Purpose . . .**

If your Shipping Room, Advertising Department, Production Department, or Stock Room uses tags . . . CAMPBELL makes them.

Write for our sample tag portfolio No. 24 . . . or let us quote you on your requirements!

**Folding Boxes**

Get our estimates on your printed folding boxes, display cards, and paper gaskets. Forty-two years experience behind our products.

**Detroit Office**  
14254 Prevost  
Phone: Redford 4112

**Chicago Office**  
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Phone: Seeley 4731

**Cleveland Office**  
Rm. 300, 1935 Euclid Av.  
Phone: Cherry 7242

**Indianapolis Office**  
620 Bankers Trust Bldg.  
Phone: Riley 5641

**MAIN OFFICE**

**St. Louis Office**  
112 Walnut St.  
Phone: Central 8232

**Kansas City Office**  
R.F.D. #4, Kansas City, Kan.  
Phone: Fifield 4662-N4

**CAMPBELL BOX and TAG CO., SOUTH BEND, IND.**

**BEAVER COAL**

## Bituminous Coal

**MINES:** Scalp Level, South Fork, Hastings and La Rayne Districts of Penna., and Fairmont District of West Virginia.

**SIZES:** Lump — Egg — Nut — Pea — Stoker — Mine Run—Especially Prepared Coal for Pulverizing.

### CORTRIGHT COAL COMPANY

**PENNA. BLDG.**  
**PHILADELPHIA**

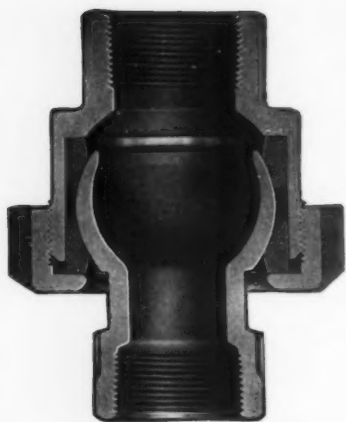
**ONE BROADWAY**  
**NEW YORK**

# KRON

## DIAL SCALES

for industry's every need

THE KRON CO.  
BRIDGEPORT CONN.



## FLEXIBLE INSULATED PIPE JOINT

No. 285

**I**NSULATION OF STEAM lines to plating tanks is accomplished in this flexible pipe joint by the use of non-metallic seats for the ball. The other parts of the assembly—ball, socket, and clamping nut—are of malleable iron. The joint is tested for 125 volts direct current service and 200 pounds per square inch steam pressure. In addition to this, the flexibility insures against pipe breakage due to expansion, contraction or vibration strains. Adaptable also for heating and cooling lines, and cleaning tanks, they may be safely used with hydraulic pressure up to 800 pounds in the 1/2-inch size, 1,000 pounds in sizes up to 1 1/2-inch.

*See coupon page 48*

## SELF-SERVICE RECEPTION

*(Continued from page 29)*

this house telephone has been installed. Ordinarily it is a "dead" line—until connected by another switch at the buyer's desk. When, at his discretion, it is desired to have the salesman connected with an operating or technical executive, the buyer arranges the connection and switches it to the representative.

For those times when the buyers are not on call, the telephone is connected with the switchboard and a note asks callers to use it.

The operation of this unique system has been highly successful from the viewpoint of the purchasing department, and this without special receptionist services except to the extent that the secretarial assistants of the various buyers participate in the routine. Correspondingly, the contacts have been direct and prompt.

From the salesman's viewpoint, the plan likewise has received cordial commendation. One clear indication of this feeling is found in numerous requests as to where such apparatus can be obtained for use in their own company offices. The answer to this question, however, is passed right back to the inquirer. It's a home-made system, developed by an ingenious buyer to meet a situation that arose in his daily work. On the basis of his successful plan, any competent electrician can rig up a similar device to fit the particular needs of an office and organization, just as Scovill has done.

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# ACRES OF GOLD

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Just as significant today as when it inspired Chautauquan audiences is the classic recital of the man who sought fortune in far-off lands, when it reposed under the soil of his home.

There is a tendency in some forms of industrial marketing to ignore the golden opportunity close at hand. Intensive sales and advertising effort are applied to finding an elusive official with power to buy, when usually he is in clear sight and available.

In big industry he is the purchasing agent. He is employed to buy and his job is to decide the sources which can supply the needs of his company with greatest ultimate economy. He confers with other officials, of course; in fact, one plank in his codified principles stipulates that he shall be "receptive to competent counsel from his colleagues, without impairing the dignity of his office." In most instances the final decision is his, and he rarely decides without knowing important facts about what and from whom he is buying.

Purchasing agents do not have to be lured into reading advertising. If the advertising is informative they read it gratefully because of the possibilities of finding new and desirable sources of supply, or of discovering items which can be passed along to technical or production colleagues for investigation and practical tests.

That is why PURCHASING is an essential medium for advertising directed to the large-scale industrial, public utility and governmental markets.

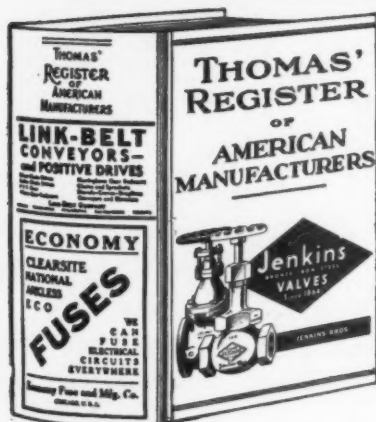
PURCHASING

11 West 42nd Street

New York, N. Y.

## Separate Lists of the manufacturers of every product

With descriptive information about the products of thousands of them.



## A LIBRARY OF INFORMATION

All in one 5,000 page combined directory and collective catalog

### A GENERALLY USEFUL AND PROFITABLE SERVICE FOR

Executives  
Purchasing Departments  
Sales Departments  
Engineering Departments

Research Departments  
Laboratories  
Superintendents  
Works Managers

and all others having to do with investigating, buying, specifying, or who require names of American Manufacturers in **any line**, for **any purpose**.

A few of the various services it is now rendering to more than 25,000 concerns in the U. S.—*All Lines—Everywhere.*

It often saves more per week than it costs per year.

#### ❑ For Purchasing and Purchase Research

The *efficient buyer* needs the names of *all* sources of supply for everything, *instantly* at hand to facilitate securing any requirement;—

Thomas' Register supplies this essential information with an efficiency unequalled by anything else. All manufacturers of any product with descriptive product matter for thousands of them.

#### ❑ In Conjunction With Catalogue Files

*Look in the Register for any product you want. It will instantly show you whose catalogues and circulars to consult, or whose to write for—often worth its cost for this service alone.*

*TR has in excess of 15,000 factual descriptions from manufacturers.*

#### ❑ A-Z Blue Section—Instantly shows home office of any concern, or nearest branch office; also its affiliated and subsidiary concerns.

#### ❑ A Capital Rating for Each Name—One of its many valuable features. *The capital ratings are often useful in making the selection desired, either when buying or selling.*

#### ❑ Locating Successors to Discontinued Concerns

Being able to promptly secure a replacement part often saves many times the cost of the part.

#### ❑ Generally Useful to Everyone

*Write for details of thirty-day offer.*

## HOW THOMAS' REGISTER SAVES ON PURCHASES

Because THOMAS' REGISTER is *complete*, it enables the Intending Buyer—

- 1—TO INVESTIGATE a number of sources of supply which will assist him in making the most economical purchase.
- 2—TO ADD new names to his present list of sources of supply.
- 3—TO VERIFY his present prices and bids—thus insuring an economical purchase for all requirements.
- 4—TO MORE QUICKLY LOCATE sources of supply for requirements which are new to his department, thus saving the time lost in referring to numerous catalogues.
- 5—TO INVESTIGATE possible savings which can be effected by substitutions or improvements in present material, machinery, and methods.
- 6—TO RECALL TO MIND products previously presented by a salesman or through an advertisement.

TRY THESE SUGGESTIONS ON YOUR NEXT PURCHASES—WE FEEL CERTAIN YOUR SAVINGS WILL BE SUBSTANTIAL.

**THOMAS PUBLISHING CO., 467 Eighth Avenue, New York, N.Y.**

# 3 SHIPS MADE HISTORY IN 1492

NINA, PINTA, SANTA MARIA



## 3 FILES ARE MAKING HISTORY IN 1936

All through history, before and since Columbus discovered a new world with 3 ships in his fleet, the number 3 has stood for success.

Today 3 file brands are making history throughout industrial plants with their ability to remove stock faster and reduce filing costs.

Interestingly enough, these 3 brands are stamped on files with up to 3 times as many cutting edges per square inch — on files that mechanics say last 3 times as long as ordinary files.

These three brands—Black Diamond, Nicholson, McCaffrey—are now in demand by file users everywhere. Available at your hardware wholesaler's or mill supply dealer's. Nicholson File Company, Providence, R. I., U. S. A.

## A FILE FOR EVERY PURPOSE

MADE IN THESE BRANDS  
NICHOLSON  
BLACK  DIAMOND  
McCAFFREY 

Patents  
Pending

# ANNOUNCING

## GOLD DUST IN 25 AND 50 LB. SIZES FOR INDUSTRIAL USE

### Cut cleaning costs with this labor-saving cleaner

Here's a way to cut down on cleaning costs. Standardize on Gold Dust—the one cleaner that does every cleaning job! Floors—walls—windows—painted woodwork—porcelain...whatever needs cleaning can be made bright and shining with Gold Dust. It does more work, quicker and better, than ordinary cleaners. And tests prove that Gold Dust costs less *per job*.

Try Gold Dust at our expense. Mail the coupon today for a trial size package—free. Put it to any test you want in your own plant, in competition with the cleaner you are now using. Judge for yourself on the basis of results.

If your dealer cannot supply you with industrial size drums, order direct from Gold Dust Corporation, 88 Lexington Avenue, New York City.



## GOLD DUST

KILLS ODORS AS IT CLEANS

#### SEND FOR FREE SAMPLE

GOLD DUST CORPORATION  
88 Lexington Avenue, New York City  
Please send me by return mail, without cost or obligation, a free sample of Gold Dust for trial.

P 9-36

Name.....  
Company.....  
Address.....  
City..... State.....